W2NPT

The Resonator

Official Newsletter of The Fair Lawn (NJ) Amateur Radio Club

Volume 3, Number 11 **www.FairLawnARC.org** **November 2018**

From The President:

Dear FLARC Members,

I am very happy to announce the completion of our 2018 Antenna Project. We had great participation for the event and many of us learned what it takes to do the work and maintain our antennas going forward. The improvements and additions to our antennas will make operating at the club more enjoyable and a viable option to use for events. Thank you to all who helped! Catch the video of the project on our YouTube page. [**http://youtube.FairLawnARC.org**]

Don't forget to join us on November 23rd from 6-10PM for the annual FLARC ham radio auction. Please join us as a buyer, seller, or spectator and find something you need for your shack. KJI Electronics will be at the auction, please support our local ham radio businesses. Or you could maybe volunteer to help run the auction!

If you can contribute by cooking food for the December Annual Meeting please contact Gene WO2W. The club will compensate you for the cost of the food as long as you can cook it and bring it. See you there!

Brad
KM2C – FLARC President

Inside This Issue

Member Profile

NAME: **Jim** CALL **W2JC**

What do you do/what did you do for a living?
What types of work have you done?

I retired from my last 'formal' job about ten years ago (lucky me!) but I do some things these days for 'spending money' ...

When I was first a General, in high school, Van W2DLT and I signed up for Army MARS and as a result we were introduced to RTTY (Radio TeleTYpe) which was used extensively to handle messages from servicemen in Vietnam and other locations. Because of my ham radio experience during high school, I decided to study Electrical Engineering in college (with the subconscious plan that I could then build better and better ham stations!). On graduation, one has to find a job -- is it a surprise that I chose to work for Western Union (in the teleprinter department)?!

From Western Union I went on to ITT World Communications (overseas communications, mostly via undersea cables, using teleprinters). During the job interview, I was asked if I knew anything about Model 28 Teletype machines. At the time, the Model 28 was the "Cadillac" of teletype machines. Well, while in high school, one of the MARS members -- who also happened to be a VIP in Bell Labs (Claude Kagen W2UUI) challenged me: "If I give you a box of parts and the parts manual for a Model 28 Teletype, and you put it all together and it works, then you may keep it." What a challenge for a 16 year old! Needless to say, that was more important than homework most evenings during high school.

When I replied to the World Comm interviewer: "I built one from parts" his response was "You're hired; when can you start?" Later in that job, I designed and had built a complex international switching system filling an entire floor of the old PanAm (airline) building in NYC -- using only mechanical switching & mechanical coding in the Teletype equipment.

You never know how a "good deed" you do for a young student will turn out -- in my case, it changed and enhanced the whole first half of my career. Thank you, W2UUI.

Continued on page 3.

The Club

Fair Lawn ARC is the fastest growing ham club around, with five operating positions in a permanent clubhouse. Visitors and guests are always welcome. The club is open every Friday night from NLT 6:30 PM. Business meetings are the first Friday of the month at 7:30PM.

2018 Officers, Committees and Assignments

President	**Brad Kerber**	**KM2C**
Vice President	**Lowell Van't Slot**	**W2DLT**
Treasurer	**Al Rasmussen**	**WA2OWL**
Secretary	**Randy Smith**	**WU2S**
Trustee	**J Cooper**	**W2JC**
Trustee	**Skip Barker**	**KD2BRV**
Trustee	**Don Cassarini**	**N2PRT**
Field Day	**Steve Wraga**	**WA2BYX**
Member Services	**Judith Shaw**	**KC2LTM**
Publicity	**Ed Efchak**	**WX2R**
Publicity	**Gene Ottenheimer**	**WO2W**
Publicity	**Susan Frank**	**W6SKT**
Program	**Lowell Vant Slot**	**W2DLT**
Publicity	**Karl Frank**	**W2KBF**
Publicity	**Brad Kerber *(ex officio)***	**KM2C**
Social Media	**Dave Marotti**	**NK2Q**
Video/YouTube	**Thom Guida**	**W2NZ**
VE Liaison	**Gene Ottenheimer**	**WO2W**
VE Liaison	**Pete Senesi**	**KD2BMX**
Education	**Gordon Beattie**	**W2TTT**
Education	**Randy Smith**	**WU2S**
Education	**John L. Howard**	**KD2NRS**
Education	**Fred Wawra**	**W2ABE**
History	**Fred Belghaus**	**W2AAB**
Health and Welfare	**Judith Shaw**	**KC2LTM**
Photographer	**Don Cassarini**	**N2PRT**
W2NPT Trustee	**Paul Cornett**	**W2IP**
Technical	**Paul Cornett**	**W2IP**
Technical	**Randy Smith**	**WU2S**
Technical	**Fred Wawra**	**W2ABE**
RACES Director	**Dave Gotlib**	**KD2MOB**
RACES Liaison	**Steve Wraga**	**WA2BYX**
Newsletter Editor	**Ed Efchak**	**WX2R**
FL Town Liaison	**Gene Ottenheimer**	**WO2W**
Net Scheduler	**Brian Cirulnick**	**KD2KLN**

Fair Lawn RACES Corner

Greetings to all,

There's lots of happenings at the Fair Lawn Radio Amateur Civil Emergency Service (FL-RACES) these days and this is because of the volunteers like you that make this organization what it is today. Here is a brief summary of our happenings:

We have been invited and I have graciously accepted an invitation by Nancy Brouca , Director of Fair Lawn CERT to provide a radio emergency presentation to the Fair Lawn CERT membership on Thursday, December 6th at 1930. In order to prepare for the presentation, we will have additional meetings this month on the following dates / times:
Friday, November 9th at 1930
Friday, November 30th at 1930 (if necessary)

The Fair Lawn CERT Meeting will be taking place on Thursday, December 6th at 1930 at the Municipal Building, Room 205 located on Fair Lawn Avenue. We have been invited as a group to the Fair Lawn CERT meeting.

On Wednesday, January 9th and Wednesday, January 23rd, we will be hosting as the net control operator for the BC-RACES Nets. There will be more information on this in our next Resonator column. We have participated in the BC-RACES Nets for several months. However we will be hosting for the first time in January!

The Bergen County RACES nets are held on the 2nd and 4th Wednesdays every month at 1945 and various towns host these nets throughout the year.

Continued on page 14.

Member Profile, Continued

As computers began to replace Teletype mechanical equipment, I was eventually "surplused" from World Comm and soon was teaching Vocational Electronics at the high school level. That lasted ten years, until I was eventually lured away by a former student who had gone to college and was working for an 'automatic test equipment' company that was looking for engineers! (A $6k per year raise was enticing; not having the summer off was a drawback).

From there I went on to another ATE small company and became the Documentation Department -- generating User Manuals for the equipment sets, proposals for new bids, etc. When the internet appeared (with 56k dial modems) I got interested in email at home, and convinced the company they should use it as well. So I became the Postmaster too! Years later, that company was bought out (and eventually abandoned) by Flextronics International (FLEX). When they abandoned our department, it was time to decide whether to look for a new job or to retire. That was not a hard choice!

How did you get interested in ham radio?

When I was 14, some guy (Bill Schnarz, but I don't remember his call...) came to our Boy Scout troop meeting and gave a talk about ham radio. I don't remember what he said, or what the 'hook' was ... but by the end of the evening, I and another scout cornered the guy and asked "how do we get into this?" He tutored us for the Novice license and administered the test. I became WN2BVE, and my friend was WN2OOS. (If you're interested, ask me some time why the big space between the calls issued on the same day...) By the way, I realized years later that Van WN2DLT got his call assigned the same day as mine.

Jim W2JC

Member Profile, Continued

What parts of the hobby most interest you?

I spent many years using RTTY and now other digital modes. Once I got my Extra Class license and did not HAVE to learn Morse Code, I took a liking to it and became quite proficient. I still prefer CW over SSB. Working DX, collecting QSL cards, and participating in CW contests also interest me.

What does belonging to FLARC mean to you?

A club lets you get involved in things you probably would not do on your own. It's also a way to help out newer hams and those who want to learn. It's also an opportunity to help make the club one of the best (or THE best) club in the area -- and since I'm "in for life" that's important!

How can you better contribute to the club?

Well, I'm not sure ...
I am a trustee for the club;
I am the webmaster and postmaster and QSL Manager;
I maintain the main website, the blog & the calendar;
I proofread and format the Resonator newsletters;
I have designed the last several club QSL cards;
I create the flyers and emails for our Speaker Series;
I maintain the station logs on LotW and QRZ.com;
I oversee the digital operating station at position 2;
I am at most club activities and work parties;
and I take care of the club banners!

What should be the club's priorities in the next year?

Once the major antenna enhancement project is completed (thanks so much to Brad, our president, for pushing it) we should find ways to generate/allow on-the-air activity for all club members, and especially the new ones and the ones who do not have a great ham station at home.

We should have committees to take care of EACH major function of the club -- activities, keeping operating positions clean and working, planning internal and external programs, keeping antennas in good operating condition, welcoming and assisting new members, etc. etc. There are enough small areas of committees that everyone should be able to help out with something they like and care about -- so it is not always the same half dozen who end up doing everything. Have you noticed that for the past year or so, it has been the Publicity Committee that has pretty much ended up doing everything? (Until the antenna project, at least).

Member Profile, Continued

We should also clean up the club constitution and bylaws to bring them up to date, and clarify some things that are a bit vague.

[hah, WX2R insisted I should answer these questions ... so I'm letting it all out. :))]

What else can you tell the club about yourself and/or ham radio?

Before that guy came to the Boy Scout meeting, I was going to be a Soil Conservationist! I wonder how that would have worked out.

Ham radio is a world-wide "fraternity" and it can be surprising how being part of it can help you, and how you can help others at various times and places.

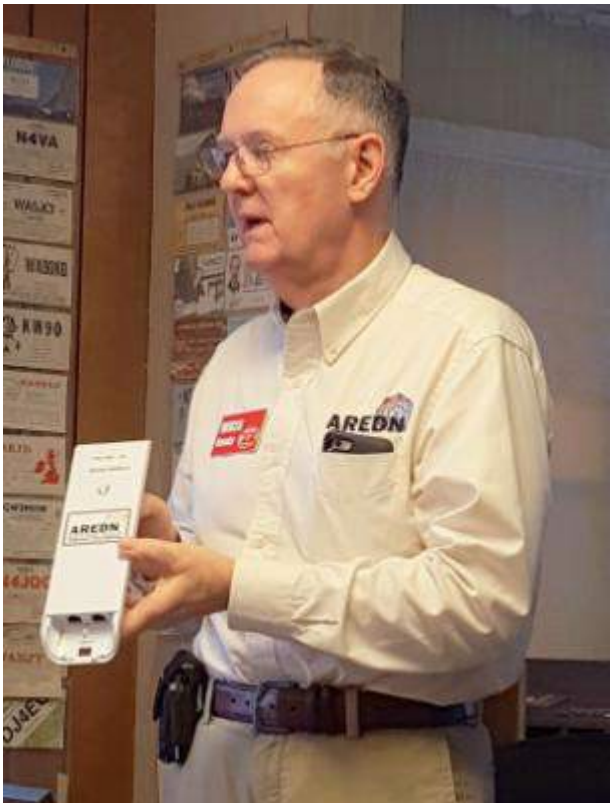
If any club members need small parts (resistors, capacitors, old transistors and ICs, wire, etc. for projects, ask me before you go out and buy them! I have stuff that's been waiting 50 years for you to ask. ;))

What other ham related clubs or organizations do you belong to?

I am a life member of FLARC and currently a Trustee. I'm also a member of BARA, BCFMA and a Charter Life Member of the ARRL (I saw a good deal when they first started it!). I was also a Life Member (subscriber) of 73 Magazine, but it seems that was only for the life of the magazine.

Mr. Smith Goes To Gloucester

On Saturday, October 6, FLARC Member Randy Smith, WU2S, was the guest speaker at the Gloucester County ARC monthly Tech Saturday session. Randy gave a presentation on AREDN and MESH Networking.



WU2S at Gloucester ARC--love the FLARC badge!

November 2019 Business Meeting

The November meeting was highlighted by the nominations for 2019 officers and a video of the newly installed antennas.

The November 2018 business meeting

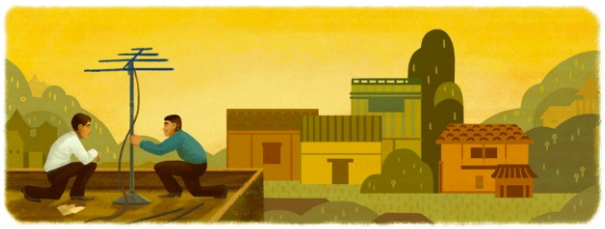
ARRL Awards Luncheon

Our own Gordon Beattie W2TTT was awarded the 2018 award for Technical Achievement at the ARRL Hudson Awards luncheon on November 3rd.

L TO R: Mike Lisenco N2YBB, Gordon W2TTT and Jim Joyce K2ZO

MASTER EVENT CALENDAR

November 26, 2018	FLARC AUCTION at the Senior Center
December 7, 2018	FLARC Holiday Party and 2018 Annual Meeting & Election of 2019 officers
December 14, 2018	The State Of The ARRL Rob Roschewsk KA2PBT ARRL NNJ SM NEW DATE!
	Upcoming 2019 Activities
January 18, 2019	Stanley Eikert K3KKH "A Wireless Three-way Antenna Switch and Display"
January 26-27, 2019	Winter Field Day (Tentative)
February 15, 2019	The 2019 FLARC Member Survey Report
March 15, 2019	RSGB Propagation Workshop or TBD
April 2019	"Earth Day At Great Falls National Historical Park" TBD
May 2019	Garretson Forge and Farm 300th Anniversary Special Event TBD
August 2019	FLARC Vintage Night II "Bring Your Own Boat Anchor" -- An evening of storytelling and demonstrations TBD
TBA	W1TP Enigma Presentation w/Fair Lawn Public Library



Hidetsugu Yagi's 130th Birthday Google Doodle

Follow FLARC ON THE WEB

Facebook:	http://facebook.FairLawnARC.org
Twitter:	@FairLawnARC
Blog:	http://blog.FairLawnARC.org
Youtube:	http://youtube.FairLawnARC.org
Website:	http://FairLawnARC.org

FLARC VEC Exams

Our next test sessions are scheduled for **Saturday, November 10th** beginning at 09:00 at the Community Center. No advanced registration is required but always appreciated. The fee is $15.00 (cash or check).

Please bring positive identification (license, passport, etc.), your original license and a copy, original CSCE and a copy (if credit is needed).

The full exam schedule is on the club calendar at the FairLawnARC.org website. For further information contact VE-Liason@FairLawnARC.org.

Please refer also to the "License Exams" link on the main website--

http://testing.FairLawnARC.org

We appreciate your support of the Fair Lawn Amateur Radio Club!

This is your Club! Be part of it!

Theoretics Demystified

The sun has freckles? NOT NOW! Sunspots are magnetically driven and right now we are on the low ebb of sunspots as the sun seems magnetically quiet. Since we have a distinct lack of them this is making contacts on some of the ham bands more difficult.

First of all the ionosphere is composed of several layers of ionized particles which act as a mirror bending the transmitted waves back to earth thus providing us with skip propagation which enables us to reach other hams way over the horizon sometimes bouncing between earth and the ionosphere several times thus allowing 'weak signal' propagation. There are several ionized layers and in particular the D layer almost disappears at night allowing for more skip.

Sunspots are viewable because of a lower temperature area which is due to concentrations of magnetic field flux which inhibits the normal convection on the surface of the sun. Associated with sunspot groups are coronal mass ejections, that is the 'sunstuff' being ejected into outer space. The sunspot cycle is about 11 years and varies from solar maximum to solar minimum.

The effect on HF radio propagation is such that when there ARE sunspots (the more the merrier) propagation is enhanced as the solar wind contains more charged particles (UV in particular) to ionize the atmosphere (think ionosphere) and thereby enhances the reflectivity of the various reflective layers and that helps propagation characteristics particularly in the daytime.

To be more specific sunspots produce more radiation that intensifies the ionosphere and thereby improves sklp propagation on the other hand solar flares and eruptions on the sun can, during their duration, cause the D layer to absorb more RF and thereby reduce that sklp propagation. This is a very complicated subject but this article can be a good starting point for further research.

73, Fred W2ABE.

DATE CHANGE FOR FLARC DECEMBER SPEAKER SERIES

December 14, 2019

Fair Lawn Senior Center
Rob Roschewsk KA2PBT
ARRL NNJ Section Manager
"The ARRL NNJ Field Organization"

Get Direct With FLARC!

Here is a direct link to specific club info: just a click away!

http://apparel.FairLawnARC.org
http://auction.FairLawnARC.org
http://blog.FairLawnARC.org
http://calendar.FairLawnARC.org
http://events.FairLawnARC.org
http://exams.FairLawnARC.org
http://facebook.FairLawnARC.org
http://testing.FairLawnARC.org
http://news.FairLawnARC.org
http://swap.FairLawnARC.org
http://tech.FairLawnARC.org
http://youtube.FairLawnARC.org

NEW !

https://groups.io/g/FairLawnARC

October 2018 Blog Traffic

October was the second consecutive month with a drop (albeit slight) in page views with an increase in visitors... maybe the algorithms have changed or the bots have gone south for the Winter. Here is the data:

	October 2018	October 2017	Change
Views	649	665	-2%
Visitors	392	363	+8%
Posts	9	5	+80%

And we continue to grow!! There is new content nearly every day so it's really worth the look to both FairLawnARC.org and the blog.

http://blog.FairLawnARC.org

FLARC Members Assist In Passaic County Emergency Communications Test

On October 6, 2018 our Passaic County Sheriff's Department Volunteer Communications team managed surveillance and assisted with Incident Command dispatch functions at a Poetry Festival held in Courthouse Square in Paterson, NJ. In charge was Sheriff Officer Rob Scott, KD2ION, who supported FLARC members Dave Henninger N3UXK, Aly Badawy ALØY, and Gordon Beattie, W2TTT.

They deployed and managed two PTZ and four fixed cameras over a 5 GHz AREDN Mesh network with a dual Blue Iris console in the PCSD Fieldcom unit. They also conducted six net sessions for the Passaic and Bergen County Joint Simulated Emergency Test as part of an incident-within-an-incident scenario. Paterson Mayor Andre Sayegh has also taken an active interest with his attendance at the event.

Gordon will be publishing a summary of the work at the event for an upcoming issue of *QST*.

Gordon W2TTT, Paterson public officials, Aly ALØY and Steve KA2YRA

The MESH setup used during the event.

Club Apparel Is Here!!

Club apparel is always in vogue. Red is always in and your club friends all have them... you *want* a shirt or jacket for the next FLARC event!

Don't forget.... they're easy to order.

Go to www.hamthreads.com
or visit http://apparel.FairLawnARC.org to **check out the item selection that is posted on the FLARC website (with pictures and prices)**. Order the shirts or other items you want with either the regular FLARC logo or the still-cool 60th anniversary logo.

Note:
RED is the primary and preferred club brand standard shirt color**.**

Karl W2KBF and Susan W6SKT were a perfect FLARC pair at the Edison National Historical Park in August.

Congratulations!

Pete (KD2BMX) reports the results of the October 20, 2018 FLARC VEC Amateur Radio Exam Sessions:

Total Number of Candidates served: 4
Congrats to all!!

Name	Call	License Earned
Alexandre Romanovski	KD2QQH	Technician
Gregory Cokorinos	KC1KKS	Technician
David Chester	KD2QQI	Technician
Thomas Holzer	KD2QQJ	Technician

FLARC By The Numbers

1st Quarter -- 28
2nd Quarter -- 31
3rd Quarter -- 32

The average weekly attendance

1st Quarter -- 64%
2nd Quarter -- 66%
3rd Quarter --66%

The percentage of total club members who have attended at least one club meeting

1st Quarter -- 14
2nd Quarter -- 15
3rd Quarter --18

The average number of weekly check-ins to the *Near and Far Net*

1st Quarter -- 365
2nd Quarter -- 408
3rd Quarter -- 381

Total gross attendance (members and guests) at the clubhouse on Fridays (members and guests)

YTD -- 1,154

Total gross attendance (members and guests)

Tnx to Judith KC2LTM for the great record-keeping!

BE IT KNOWN TO ALL MEMBERS:
ANNUAL MEETING NOTICE

The annual meeting of the Fair Lawn Amateur Radio Club (FLARC) will be held on Friday, 7 December 2018 beginning at 6PM (1800).

Fair Lawn Senior Center
11-05 Gardiner Road
Fair Lawn, NJ 07410

The New Antennas Become A Reality

What:
An installation of new station antennas for W2NPT .

Why: Our antennas did not meet the need of the club to operate successfully in contests or events. We did not have anything below the 20M band. Half of the antennas either did not operate properly due to maintenance issues or age. The two towers needed inspections and maintenance performed that was not being done. We made some improvements to the previous installation and took no shortcuts to make sure the work being done will last.

When: During September and October 2018

Where: High atop the Community Center Clubhouse

Who: Brian KD2KLN, Bennett KO2OK, Steve WA2BYX, Fred W2AAB, Gene WO2W, Karl W2KBF, Matt K2FTP, Tony N2SIQ, Aly ALØY, Ron KC2TBD, Skip KD2BRV, Noel N2MSN, Steve WI2W, Jim W2JC, Brad KM2C, Van W2DLT, Paul W2IP and Zach KC2RSS.

How: Extensive pre-planning during the Summer and early Fall followed by the actual installation over a three week period.

How much: Approximately $3,500 to date with an allotment of $4,000 for the project.

KM2C and KO2OK on the tower, with W2JC "supervising"!

"We are going to need a bigger gin pole!"
Brian KDDKLN (L) and Brad KM2C atop the roof.

Assembly of the HF beam
L to R: Wi2W, KM2C and K2FTP.

What's On The Roof?

Tower 1:

- 2M Beam (repaired, was part of original installation)
- HF Beam – Optibeam OB10-3W 10 Element 3-band (20/17/15M)
- Dipole – MyAntennas OCF-4010E-3K (10-40M off center fed dipole) – donated by Karl W2KBF

Tower 2:

- Diamond XD510HDM Dual-band repeater antenna
- 6M 5 element M^2 6M5XHP Beam (repaired, was part of original installation)
- 10M 3 element beam (donated by Steve WA2BYX

Additional Improvements:

- We also increased the height of both towers by inserting a 10' section of Rohn 45 tower between the old 10' and 5' sections previously installed on each tower.

- We replaced all the coax on the roof connected to the towers to insure long life out of the antennas without concern for UV impact on the old coax cables.

- Tower 1 now has a dipole on a pulley that can be easily dropped, swapped, and try out other types of dipoles without climbing the tower.

- Tower 2 now has a second HF beam on it for 10M (we had 10M on the old beam so wanted to not lose that capability).

Additionally:

We have also updated the patch panel in the office to reflect the new antennas.

A study followed by actions will be taking place to understand and correct the high noise issue we have in the area around the Community Center on HF so we can improve our setup further than just the rooftop work that was completed.

TNX to all for the great pix!!

Installed and nearly operational!

Well marked details

The New Antennas Become A Reality

Attaching the 2meter beam

Steve WI2W and Zach KC2RSS with the 2m beam

"The club would like to extend a big thank you to all of those who worked to put this together and probably something larger for Bennett KO2OK and Brian KD2KLN since they have risked more than others by climbing.

Bennett has climbed all 4 days, Brian has climbed 3 days, and I have climbed 2 (I am afraid of heights so that's my excuse LOL)".

Brad KM2C

Installing the HF beam

The HF beam installed

Up on the roof as the work begins

Working on the tower

Getting Started with HF Gear

By Karl Frank W2KBF

This article is written for newly licensed hams, particularly those who have upgraded recently to the General Class license, and also those who are getting back into the hobby after a long period of inactivity. Both groups may be overwhelmed by the many choices available in modern HF equipment and may put off the purchase of a HF rig for fear of making a mistake. For these people, I offer a few suggestions.

First, join a local Amateur Radio club and purchase a UHF/VHF radio so that you can access local repeaters and participate in public service events. Even a small handheld radio will get you on the air. You will meet lots of friends with similar interests and find that almost everyone is happy to give you help and advice, perhaps more than you need or want. Hams do like to talk ☺.

Next, you may want to set up a HF station in your home. HF (High Frequency, also called Short Wave) is defined as frequencies from 3 to 30 MHz and offers long distance (DX) communications without the use of repeaters or the Internet. These long distance communications may be why you wanted to get your license in the first place. Note that Technician Class licensees have HF voice privileges only on 10 meters, which may suffer from current band conditions, whereas General Class licensees enjoy voice and data privileges on several of the lower HF bands. This is a powerful incentive to upgrade. Most people will be happiest with a radio that covers multiple HF bands and puts out 100 watts on SSB and CW. Personally, I would recommend that you purchase a new, basic radio from Kenwood, ICOM or Yaesu -- but many fine used radios are available at low cost (more about this later).

Your physical location may limit your choice of antennas. Start with simple, resonant half wave dipole antennas for 40 and 20 meters (length = 468 feet/frequency in MHz) that you can build yourself. Try to elevate your dipole at least ¼ wavelength above ground for best DX. Try for a minimum of 25 to 30 feet. The higher the antenna, the better it will work. Off Center-Fed Dipoles (OCFD), G5RVs and certain End-Fed Half Wave (EFHW) designs are slightly more sophisticated and provide multiband operation from a single wire antenna.

If there is no space for a dipole, then a full-size quarter wave vertical antenna with a few ground radial wires may be your best alternative. Antennas that are physically shortened with loading coils may be more convenient to use on your property but full length antennas will provide the best performance. Feed your antennas with good quality, low loss coaxial cable such as RG-8, RG-213 or LMR-400. These better cables will be the thickness of a finger rather than narrow like a pencil.

You cannot go too far wrong purchasing new or used equipment from Kenwood, ICOM or Yaesu but remember that purchasing a used radio is a lot like purchasing a used car. Be cautious with equipment listed on EBAY and similar sites. Try to find a used radio that is for sale by a local club member who will bring that radio to a club meeting and let you and/or an experienced friend check it out before you buy.

So what to avoid? Although a low price may be tempting, QRP (low power) rigs are not a good choice for your first HF radio (unless you intend to go backpacking with batteries). Advertisements may suggest the romantic notion of working DX from mountaintops with 5 watts or less but QRP really is for the experienced operator. At the other extreme, you will not need a 1000 watt linear amplifier to make distant contacts. Your focus should be on acquiring a good basic radio and good basic antenna. Avoid radios more than 15 - 20 years old, particularly those nostalgic "boat-anchor" models with vacuum tubes unless you are really into troubleshooting, have a workbench with test equipment and know a good source for obsolete parts.

Continued on next page.

Getting Started with HF Gear (2)

Even if you have thousands of dollars to spend, it may be wise to begin with equipment that is not too fancy or difficult to use. The main difference between a used $300 radio that puts out 100 watts and a new $10,000 radio that puts out 100 watts will be in the receiver section. Therefore, the signal transmitted by a basic radio will carry as far as the signal from a more expensive one and will be heard just as well by DX stations. The point is to avoid the frustration of purchasing, on the one hand, a radio that is too simple or antique to perform well and, on the other hand, a high-end radio that is not fun to use because it is too complicated. You can always trade up later if you become a serious contester or want to chase rare DX and find that you really need all of the bells and whistles.

It is not feasible to cover every make and model of radio that meet these Goldilocks criteria, but here are a few examples with approximate values:

Good Used Radios <= $500:

Kenwood TS-440, TS-450; ICOM IC-706 Mark 2 or Mark 2G; Yaesu FT-450, FT-840, FT-950.

Note: The IC-718 is still made but is too basic.

Good Used Radios $500 to $1000:

Kenwood TS-570, TS-870; ICOM IC-7000, IC-746 Pro, IC-756 Pro II and Pro III; Yaesu FT-920.

Good New Radios <= $1000 (best bang for your buck?):

Kenwood TS-480; ICOM IC-7100 or IC-7200; Yaesu FT-450 or FT-857D.

Very Good New Radios for a few $$ more:

Kenwood TS-590; ICOM IC-7300.

A new radio will come with a microphone and power cable but a used radio may not. Some radios will have Digital Signal Processing (DSP) which works best if in the Intermediate Frequency (IF) stage but not so well if only at the Audio Frequency (AF) stage. Radios without DSP may require crystal filters to enhance receiver selectivity and these will set you back about $100 each if they are not included. The point is: a radio pre-loaded with crystal IF filters or with IF DSP may be worth more than a similar radio without either. Some radios will cover only HF while others will cover HF, VHF and UHF. Some will have built-in antenna tuners. Some will have lots of buttons to push on the front panel while others may require you to dig deeply into menus to make adjustments. Study the owners' manuals (available online) to learn exactly what you are getting and ask your ham friends for advice.

Before you empty your piggy bank, remember that most new or used 100 watt-class rigs listed above will require a power supply that delivers 13.8 volts DC at 20 to 30 amps and an efficient antenna system. Station accessories such as a logbook and dummy load are good to have and a SWR bridge may be needed to tune your antenna to resonance. You may be able to borrow an SWR bridge (or Antenna Analyzer) when tuning your new dipole. A sling shot, spud gun or good rock-throwing arm may be needed to launch a wire antenna high into the trees.

Finally, don't be afraid to ask your fellow club members for help and advice. They can help you pick out your first HF radio, suggest an appropriate antenna for your location and may even help you put up your antenna.

Thanks to Bennett KO2OK for significant contributions to this article and to Susan W6SKT and Steve WI2W for helpful review and feedback.

73, Karl, W2KBF

Want To Learn To Be A Rover? Here's Your Chance!! November 16 !!

K2EZ Rover vehicle

BEQUEATHS AND DONATIONS

Planned gifts usually imply the family donation of amateur equipment to the club when someone has become a Silent Key. But it can be more. Club members might consider making a gift through a will or trust; gifts that help provide lifetime income to the club. Consult with your lawyer, estate planner or tax advisor if you feel such as gift is worthy.

About The Club

The Resonator is published monthly and is the official (and only) newsletter of The Fair Lawn Amateur Radio Club. FLARC was established in 1956 and has met continuously since inception.

The club meets every Friday at 7PM at the club station in The Fair Lawn Community Center, 10-10 20th Street, Fair Lawn, NJ. Business meetings are the first Friday of the month at 7:30 PM**.**
Visitors ARE ALWAYS welcome at our meetings.

FLARC operates the W2NPT repeater (145.470- PL **167.9**) located high atop the Community Center. The analog repeater is open to all amateurs for use without restrictions.

The club has approximately 125 paid members.
Dues are currently $25 per year/$20 for new members.

For more information, please see our website, at
http://membership.FairLawnARC.org

Ham Lite by Brian (KD2KLN)

NEW! A new gathering place for club members has been set up on the Groups.io service ... Why another group? It has more features than our current WordPress 'blog' and allows members to select what and how they receive emails. This group might eventually replace our current blog. If you haven't signed up yet, check it out and sign up!

https://groups.io/g/FairLawnARC

Interested in Chasing DX?

A casual group of FLARCers including Van W2DLT, John KD2NRS, Brad KM2C, Karl W2KBF, Nomar NP4H, Steve WI2W, Larry WA2ALY, Fred W2AAB, and Jim W2JC have formed an email group to keep each other in touch in (real) time of when the rare or interesting ones show up to chase. Interested? See or contact Van W2DLT or Jim W2JC.

FAIR LAWN'S
MINISTRY OF TECHNOLOGY!
With New Antennas On The Roof!

Past FLARC Member Profiles

Here is a list of past member features and we welcome your recommendations for new profiles -- including your own.

Month	Name	Call Sign
January 2016	Pete	KB2BMX
February	Marco	KC2ZMA
March	Ron	KC2TBD
April	Kai	K2TRW
May	Larry	WA2ALY
June	Dave	N8MAR
July	Steve	WI2W
August	Thom	W2NZ
September	Brian	KD2KLN
October	Brad	KM2C
November	Al	WA2OWL
December	George	W3EH
January 2017	Fred	W2ABE
February	Dave	KD2MOB
March	Randy	WU2S
April	Lee	KD2DRS
May	Gene	WO2W
June	Carol	KD2NMV
July	Kevin	KC2KCC
August	Robert	KD2NOG
September	Robert	KD2BKD
October	John	KD2NRS
November	Fred	W2AAB
December	Margaret	W2GB
January 2018	Brian	KD2OAZ
February	Bennett	KO2OK
March	Van	W2DLT
April	Aly	ALØY
May	Bruce	NJ2BK
June	Dave	N2AAM
July	Karl and Susan	W2KBF and W2SKT
August	Steve	KA2YRA
September	Paul	K2PJC
October	Skip	KD2BRV
November	Jim	W2JC

Dues Are Due

Get a jump on the calendar and send in your 2019 dues. Renewals are $25 and are the best value in amateur radio clubs around. Don't forget to include an application which can be found on the website.

Volunteers Needed!!

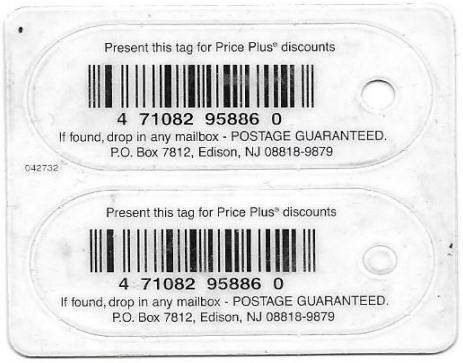
As you know, the club has grown considerably over the last year and lot of us do not know the details of the annual FLARC auction (the day after Thanksgiving) and December Annual Meeting and holiday party (December 7), so I thought I would write a brief note to fill everyone in.

The club is in the middle of replacing and improving our antenna system and equipment at a cost of about three thousand dollars. Raising money still matters and our auction is the ONLY fund raiser we do all year, so besides dues this is the only money the club gets.

Therefore we need ALL of our members to step forward to help with the auction and holiday party. Please don't be a by-stander; volunteer and help the club.

For the auction, it's setup, take-down and the actual running of the event. For the holiday party, if you would like to help prepare some of the items for the party that would be great. The club will pay the cost of the items you purchase. The two or three turkeys that we serve usually come from donations from members. If you shop at Shop Rite and get a free turkey and would like to donate it please let me know. Use club's Price Plus Number when you shop.

Gene WO2W



CW Classes Underway

George W3EH and Fred W2AAB have the CW class well underway. Fred W2AAB reported that the schedule needs to be more consistent and Brad KM2C noted that perhaps the classes should be held on an alternative day (Saturday?) to build consistency and further interest. .

Interested in joining in or signing up?
See George and/or Fred on any club night.

The Near and Far Net

Now in its second year, the FLARC Near and Far net is chugging along each week. Here is list of our check-ins beginning on New Year's Night in no particular order. Mondays at 8PM on the repeater.

Name	Call
Gene	WO2W
Van	W2DLT
Thom	W2NZ
Steve	KA2YRA
Ed	WX2R
Fred	W2AAB
Karl	W2KBF
Brian	KD2KLN
Dave	NK2Q
Ron	KC2TBD
Dave	KD2MOB
Jim	W2JC
Mike	KC2ZX
Steve	WA2BYX
Robert	KB2BKD
Susan	W6SKT
Steve	WI2W
Brad	KM2C
John	KD2NRS
Art	WA2KXE
Brian	KD2OAZ
Brian	W2EMC
John	KD2NRS
Randy	WU2S
Jon	KD2PDS
More Elsewhere in The Resonator!!	

November 2018 Net Controls

THANKS TO Tom N2AXX FOR HANDLING NET CONTROL LIKE A PRO ON OCTOBER 22ND! WELCOME TO OUR TEAM!

Remember the W2NPT FLARC repeater is at 145.470 (-) with a PL tone of 167.9. The net starts promptly at 2000 local time. Everyone is welcome.

Date	Net Control
November 5	N2AAM
November 12	N2AXX
November 19	WX2R
November 26	KD2MOB

Andrea Slack K2EZ Highlights The November 16th FLARC Speaker Series

Andrea will speak on the topic "VHF Roving: An adventure in VHF Operating" at the Fair Lawn Senior Center, 11-05 Gardiner Road in Fair Lawn beginning at 7PM. Refreshments will be served.

Andrea Slack, K2EZ has been licensed since 1980. Her introduction to amateur radio occurred at age 15 when her father invited her to attend an introductory session of a novice license class the local Amateur Radio club was hosting. She continued to attend with her father and they both earned their licenses.

For many years Andrea was primarily a CW op and she developed an early interest in experimenting with antennas. She has also dabbled in wide ranging aspects of amateur radio including DXing, contesting, satellites, digital communications, traffic handling, RACES, VHF weak signal, FM and repeaters.

She currently works as an engineer doing mixed analog, digital and microprocessor controls.

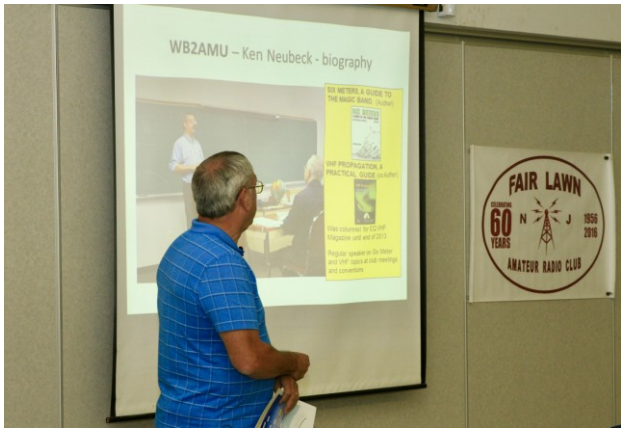
In recent years Andrea has discovered a passion for VHF roving and mobile ops. She has three national first place VHF contest wins in the limited rover category and currently holds the record for the most number of grids activated in a VHF contest. She has set half a dozen limited rover division score records and was one of the top activators in New Jersey during the National Parks On The Air.

Note: See K2EZ's vehicle elsewhere in this issue!!

Andrea K2EZ

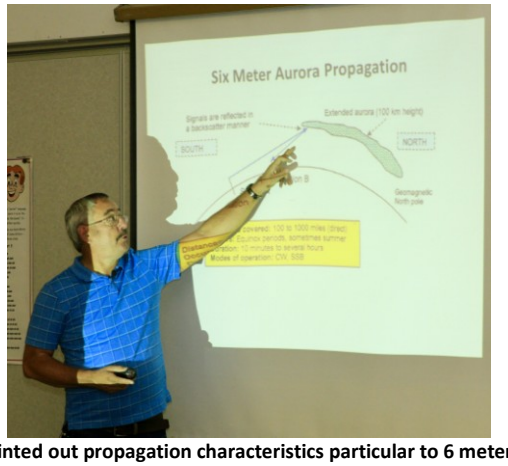
Ken Neubeck WB2AMU Provides A Master Class On Six Meter DXing For FLARC 2018 Speaker Series

A crowd of 40+ FLARC members and guests were given an informative presentation by WB2AMU on six meter DX during a poor sunspot cycle on October 19th at the Senior Center. A subject matter expert, Ken provided lots of insights on the "magic band" and many attendees said that they learned facets of the band that they never knew about and now wanted to give the band a try.



Ken points out the nuances in 6 meter activity

Forty + members and guests attended at the Senior Center



Ken pointed out propagation characteristics particular to 6 meters

Ken plays a recording of 6 meter activity as part of the presentation


Van W2DLT presents our FLARC Certificate of Appreciation


Ben W2AMP and Tom N2AXX took in the show

Fair Lawn RACES Corner (2)

Two repeaters are utilized for these nets - Paramus, NJ (RX 146.79 / TX 146.19, PL TX Tone 141.3) and Franklin Lakes, NJ (RX 146.79 / TX 146.19, PL TX Tone 162.2). The Franklin Lakes repeater is the primary repeater.

Our next FL-RACES net will take place on Wednesday, November 14th at 1900 hours. The Fair Lawn ARC Repeater is used (RX 145.47 MHz / TX 144.87, PL TX Tone 167.9 Hz). Thank you to the Fair Lawn Amateur Radio Club for permitting FL-RACES for using the repeater.

Here is another achievement - FL-RACES has a new call sign - KB2FLR.

The volunteer efforts of our members are very much appreciated. All of the events noted above could not have happened without you.

Our monthly meetings usually take place right after the FLARC business meeting. Please join us for the next FL-RACES meeting.

If you are interested in joining the Fair Lawn RACES, please contact me. You don't have to be a Fair Lawn resident to be a part of Fair Lawn RACES.

For information regarding Bergen County RACES, please go to http://www.bcnjraces.org.

Thank you very much. See you soon and 73.

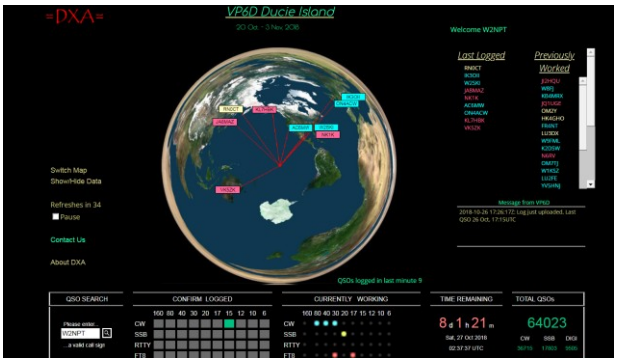
Happy Thanksgiving!

David KD2MOB

Does Our New Big Beam Really Work?

Using the new Opti beam on 15 meters at 2300 UTC (7 pm EDT) on October 26th, George W3EH was able to contact the special DXpedition located on Ducie Island, in the middle of the Pacific Ocean, with only a couple of tries !! And the signal from VP6D was quite strong.

And the QSL card has already been ordered ...



Ducie Island to FLARC

News and Notes

With all the excitement of FT8, don't forget that position 2 has been reserved primarily for that mode.

If you want to spend some time using the equipment, let one of the officers know and they'll look to set up a schedule for you with training.

A big thanks to ARRL Hudson Division Vice-Director Bill Hudzik W2UDT for coming along on our trip to the Edison Museum in Menlo Park. You're always welcome!

Don't forget the member survey will be arriving in your email box in about a month. If you have any questions you'd like to have answered from the membership, send your comments to Ed WX2R at WX2R@arrl.net and he'll work them into the final design.

Around The Shack
by Hal Kennedy

"Line-Flatteners" – Little Known – Very Handy

Dipoles for the bands covering a wide frequency range can be problematic – that would be 80M and 10M.

Let's look at an 80 meter dipole, resonant at 3650 KHz (Figure 1). The bandwidth between the 2:1 SWR points is 140 KHz - not very good. The lower 2:1 SWR point is at 3600 KHz making it nearly useless for the CW part of the band. The upper 2:1 SWR frequency is 3740 KHz – useful for the lower part of the phone band but not the upper part where most of the 75 meter phone rag chewing takes place. The antenna could be made longer for CW, or shorter for rag chewing, but you only get to pick one of the three antennas, none of which fill the bill if you are interested in the whole band. An antenna tuner can help somewhat, but notice the dipole with a 3650 center frequency has a 7:1 SWR at 4.0 MHz. That's stretching any antenna tuner and losses in the tuner as well as the transmission line go up as SWR goes up. Note this discussion is for a typical 75 ohm dipole at 60 feet, fed with 50 ohm coax. Feeding it that way is not ideal but that's how most of us do it most of the time.

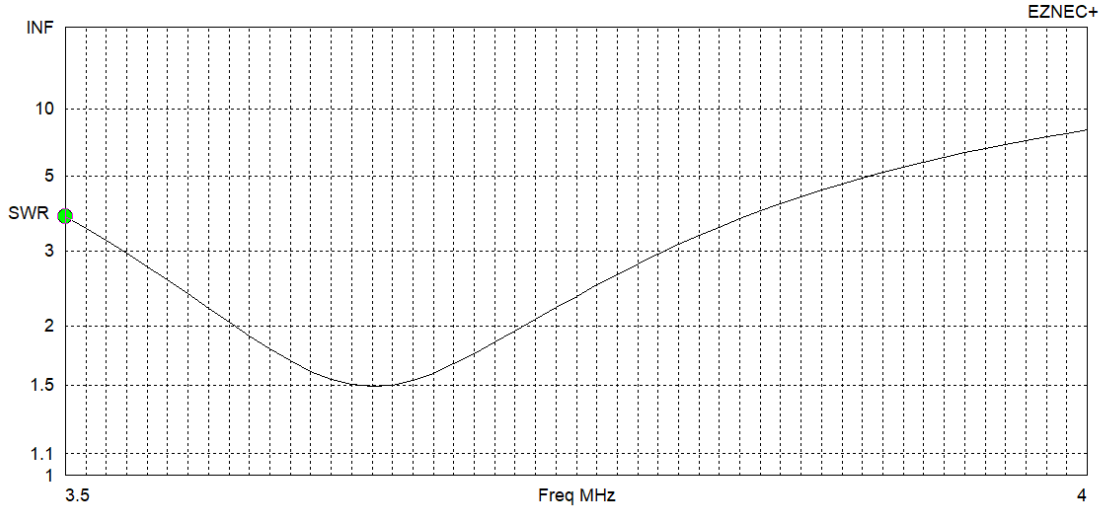


Figure 1

Typical 80 Meter Dipole (No Line-Flattener)
2:1 SWR 3.60 MHz to 3.74 MHz = 140 KHz

There are lots of methods for broadening the response of an 80 meter dipole – you can find several in the ARRL Antenna Book and the ARRL Handbook. All involve changes and the addition of parts or wires to the dipole itself – which adds complexity and reduces the reliability of the antenna. Here is a technique – the "Line-Flattener" - which will broaden a dipole's frequency response without any changes to the antenna – only the coax feed line changes and the coax feed line was going to be there anyway.

Continued on next page.

Figure 2 shows a "line-flattener." It is made up of one wavelength of 50 ohm coax, followed by a quarter wavelength of 75 ohm coax, followed by any length of 50 ohm coax - the last piece being whatever is needed to get back to the shack.

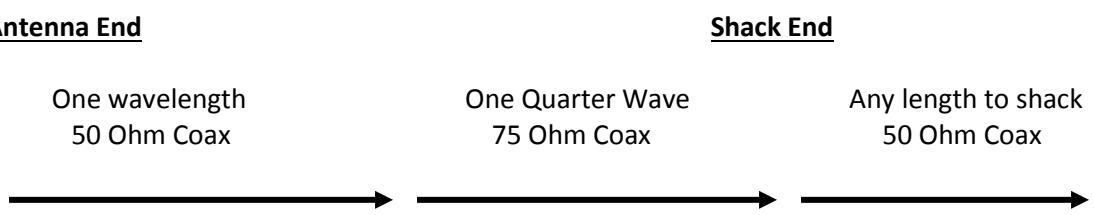


Figure 2. A "Line Flattener"

The SWR for the same dipole, with a line-flattener added, is shown in Figure 3. The 2:1 SWR has gone from 140 KHz to 380 KHz. It has more than doubled. The lower 2:1 SWR point is at 3500 KHz and the antenna covers the entire CW and digital portions of the band with ease. The upper 2:1 SWR point is now 3870 KHz. If you are willing to work into a 2.5:1 SWR then you are good-to-go from 3.5 to 4.0 MHz. The original dipole with a line-flattener added covers the entire band.

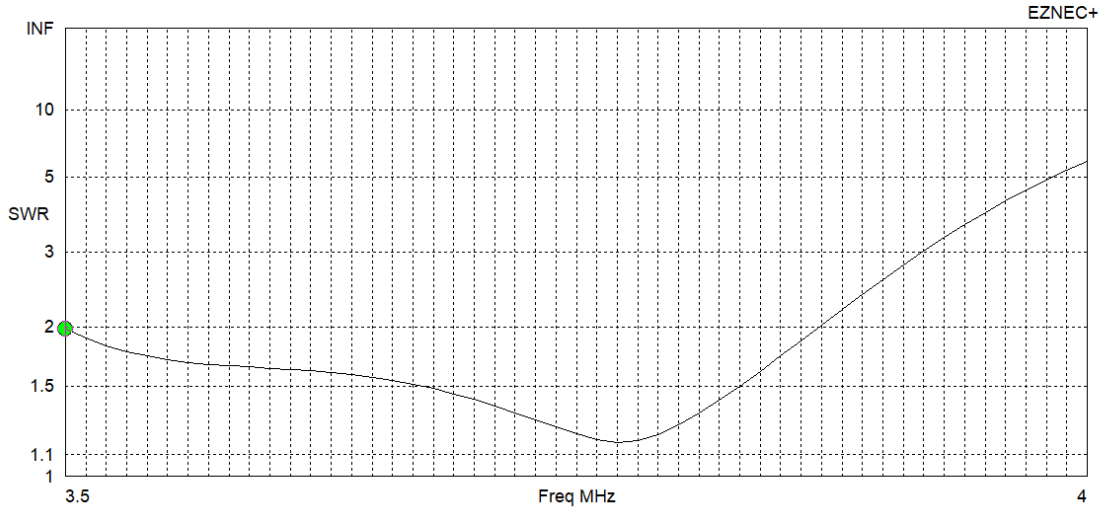


Figure 3
80 Meter dipole with Line-Flattener.
2:1 SWR 3.5 MHz to 3.87 MHz = 370 KHz!

Continued on next page.

Around The Shack (3)

As mentioned in a few presentations I have given lately, the 2.5:1 SWR at 4 MHz will appear "better" at the shack if the coax has any loss. Figure 4 shows the same antenna and coax arrangement with 1 dB/100 feet loss added into the transmission line model. 1 dB/100 feet is not an unrealistic number. The antenna with a line-flattener and a small amount of loss in the coax covers the entire 80 meter band, end-to-end, with an SWR below 2:1. (Figure 4)

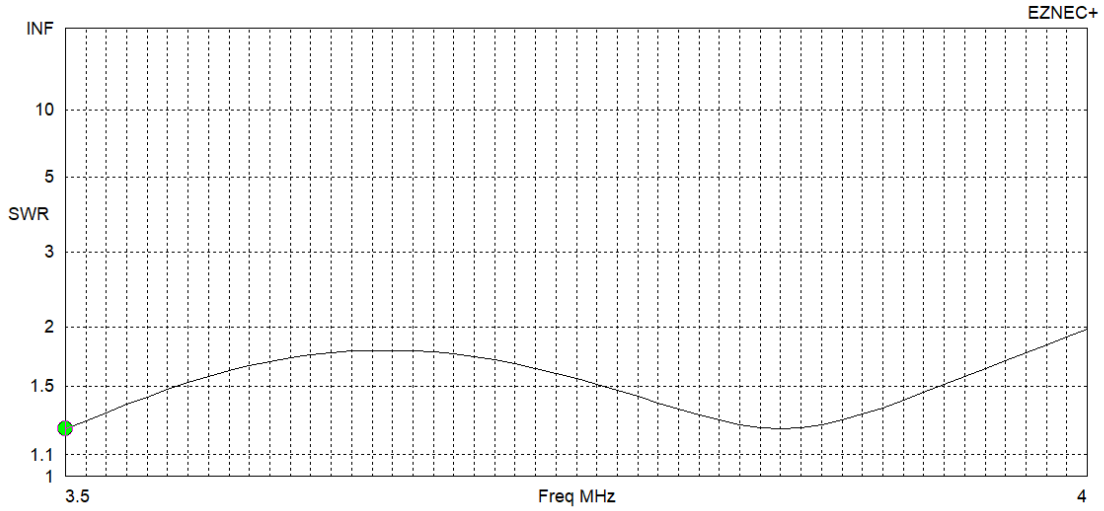


Figure 4
50 Ohm Fed Dipole with Line-Fattener and 1 dB/100 ft loss in the feed line.
SWR is below 2:1 across the entire 80 meter band.

Let's calculate the lengths for coax needed for an 80 meter line-flattener. We need to remember to include the velocity factor for coax, which is 0.84 for RG8/X (50 ohm coax) and 0.66 for RG59B/U (75 ohm coax).

The one wavelength of RG8/X coax will be: 983/3.650 = 269 feet X 0.84 = 226 feet

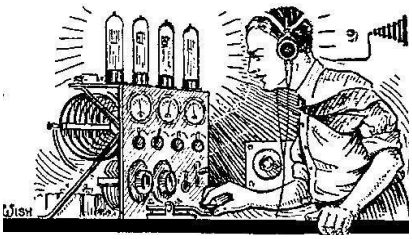
The one quarter wavelength of RG59B/U coax will be: 245/3.650 = 67.1 feet X 0.66 = 44 feet

The total length for the line-flattener is 270 feet. That's long – most of us don't need that much transmission line from the antenna to the shack. You can coil up the extra length as necessary. On higher frequencies the lengths get shorter. On 10 meters the coax matching sections will be quite short –the one wavelength section will be 29 feet and the quarter wave section will be 5.7 feet – easily managed and you will likely need additional coax to reach the shack. You can, of course, use a line-flattener on any band.

Try a line-flattener on your next dipole. You will be pleasantly surprised.

73,
Hal N4GG

Next month we will talk about "asynchronous transformers."
These are a convenient way of moving back and forth between 75 ohms and 50 ohms using only coax.



The Way We Were -- The Art Of The QSL (Part 4)

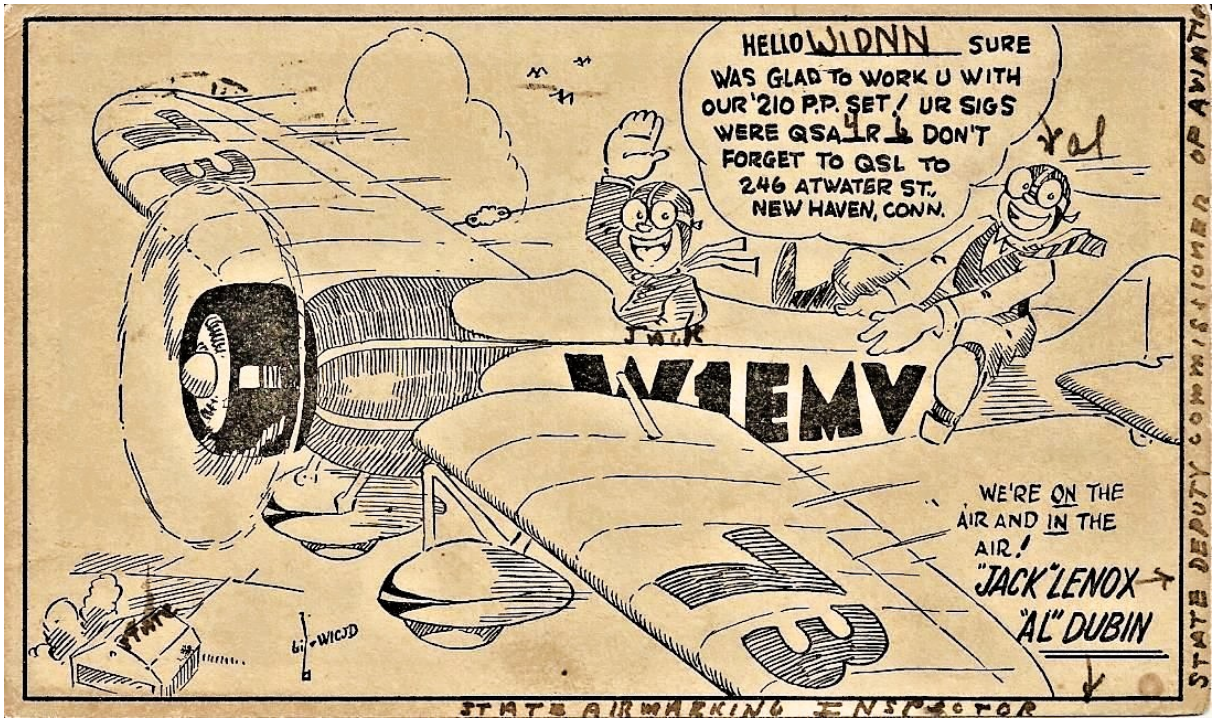
By Fred Belghaus W2AAB

This month we continue a multi-part series on QSL cards, their origin and evolution through amateur radio history

Image from May, 1926 QST, courtesy ARRL

Of all the artists that have contributed their work to our beloved hobby, the best known is Philip Gildersleeve, W1CJD. His distinctive work was signed, simply, "Gil," with his call. Examples of his work can be found in virtually every issue of QST from 1929 to 1966, and occasionally, afterwards. His cartoons in QST also graced ARRL publications such as the Radio Amateur's Handbook, License Manual, Mobile Handbook, and many others. Later, the ARRL compiled a collection of Gil's work and reproduced them in a separate volume.

Much has been written about Gil's life and work, which will not be repeated here. Two excellent articles online that can be accessed are this one by N2EST (1) and another by W8SU. (2) Another online source concentrating on Gil's published artwork has been posted by AB3AP. (3) Instead, our current series will focus solely on examples of Gil's QSL designs, and his imitators. Our earliest example comes from W1EMV in 1932:

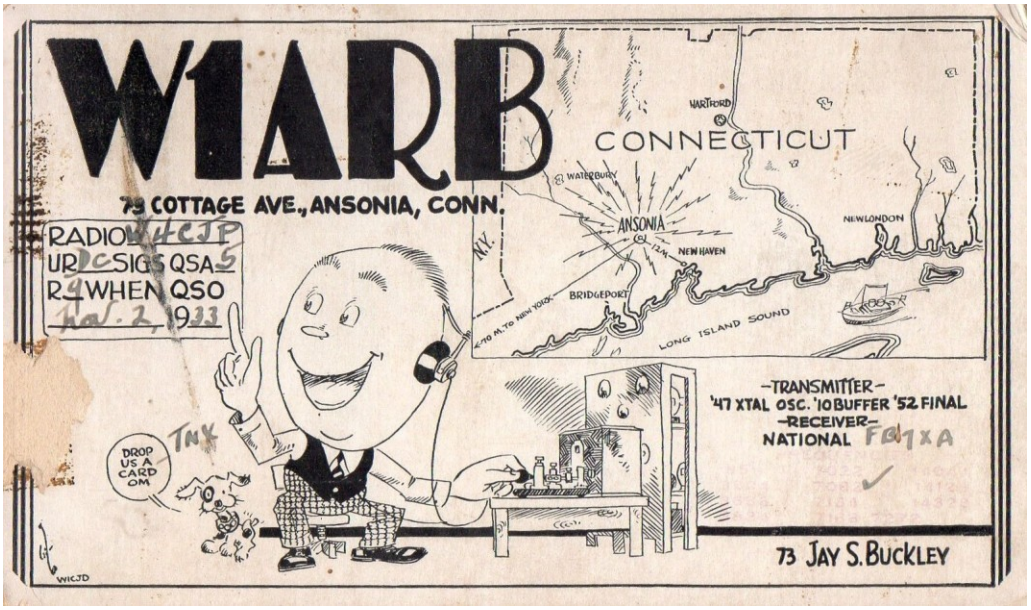


This card represents a "personalized" design, most likely requested by the customer, to reflect the operator's personal interests or habits. In this case, the operator was evidently also a private pilot. As the names Marconi, Tesla, De Forest and Armstrong inspired many to become interested in radio, the names Lindbergh, Nungesser and Coli also inspired many to take to the air as a personal hobby.

W1EMV was evidently one of those amateurs who enjoyed operating their 2-1/2 and 5 meter transceivers while aloft, in order to extend the normal range of signals on these pre-War VHF bands, long before the days of repeaters or serious weak-signal work.

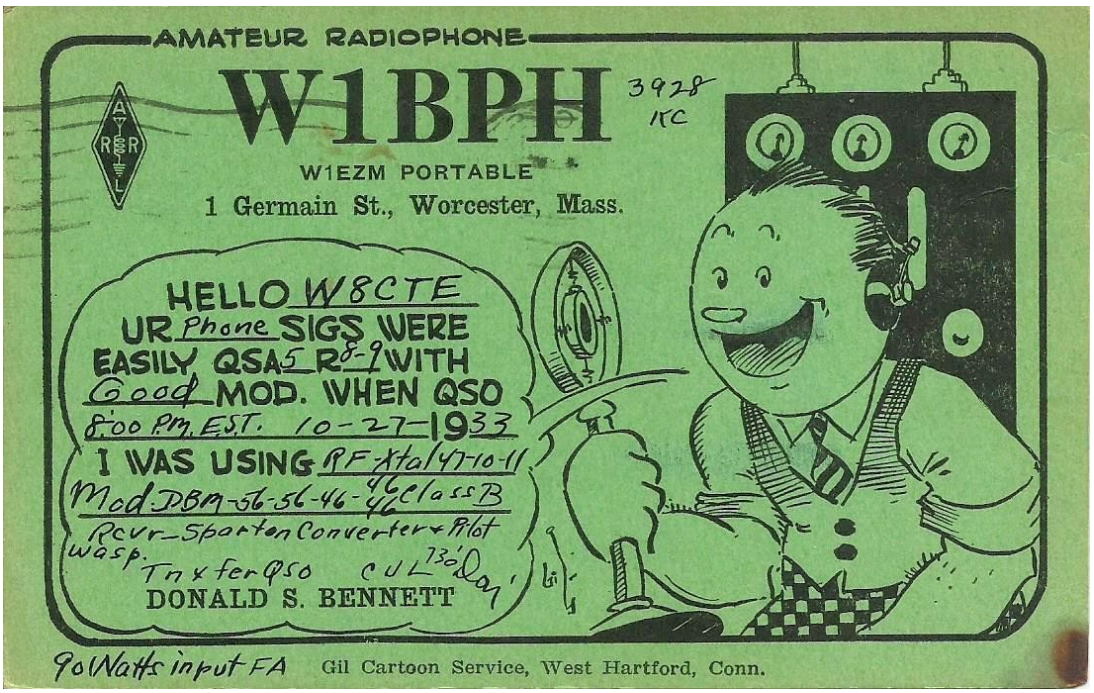
The Way We Were (2)

Here's another example of a personalized design from 1933:



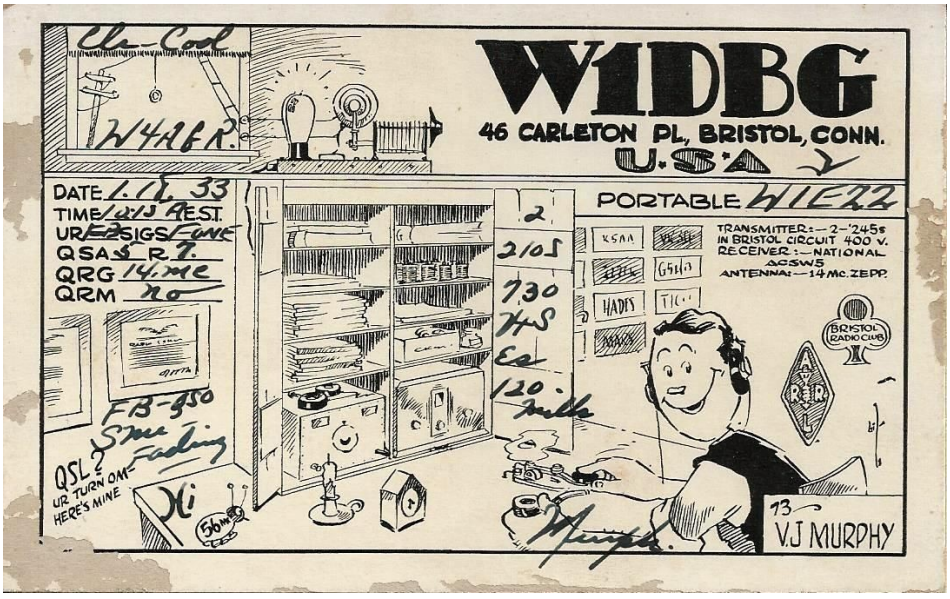
The technique used on the W1ARB card has been used on most of Gil's cards, with his distinctive rendering of human heads. I'm calling it Gil's "melon heads." Look for this distinctive feature on many other cards, as well as Gil's many drawings done for QST and other ARRL publications.

Next, this card from W1BPH dated 1933 has been copied many times by other printers. It is not known whether Gil copyrighted any of his images. This card was actually printed by "Gil Cartoon Services, West Hartford, Conn.," along with many others.



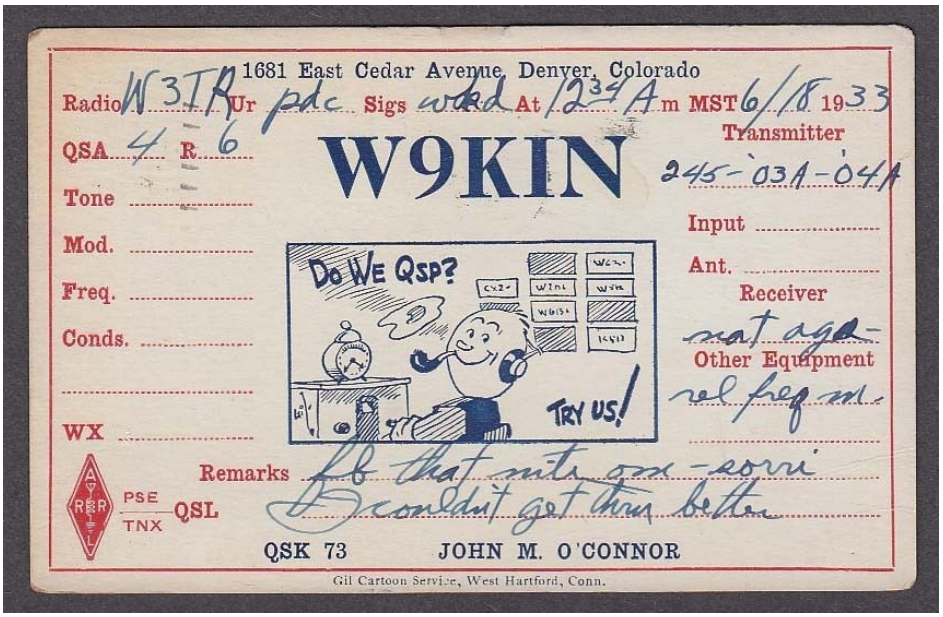
The Way We Were (3)

The card from W1DBG, also dated 1933, however, is another personalized design.



The design for W9KIN may have been intended to be a "standard cut" on Gil's cards, because the "block" within the card's borders containing the cartoon image is seen on many other designs, but I can find no other examples like this one. The typical "melon head" feature is evident, though, on this card from 1933.

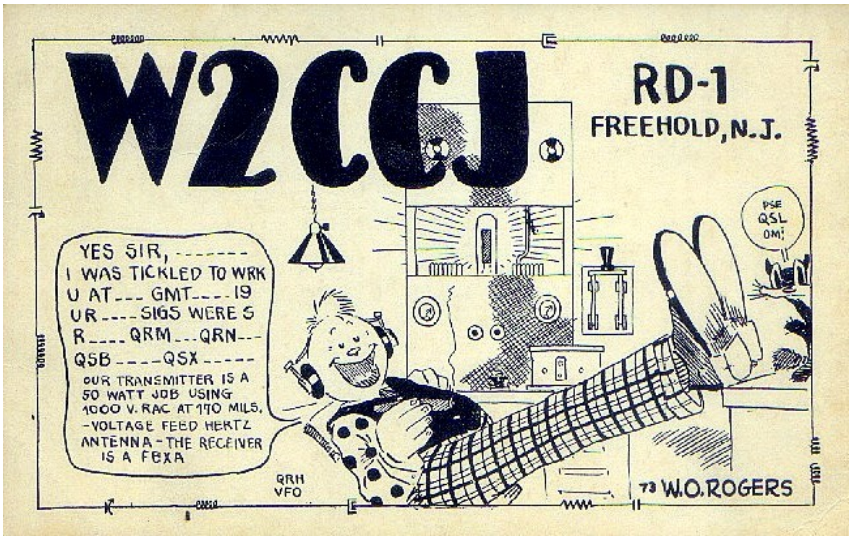
"Do we QSP?" means, "Do we relay messages?"
Evidently, the operator was an avid message handler on ARRL NTS nets.



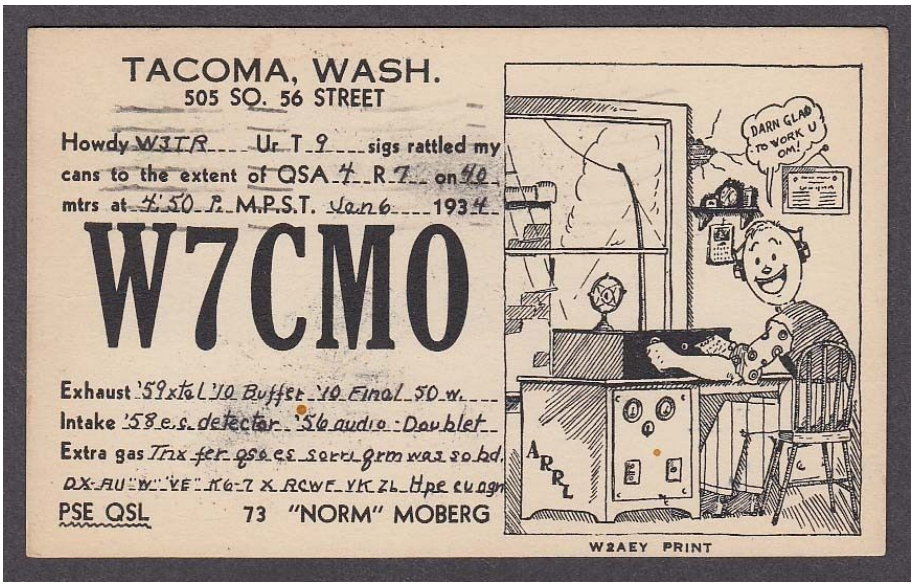
The printing is also by "Gil Cartoon Service, West Hartford."

The Way We Were (4)

Here's a more conventional, but personalized example from W2CCJ, dating from the early to mid 1930s. Although unsigned, Gil's technique is unmistakable:

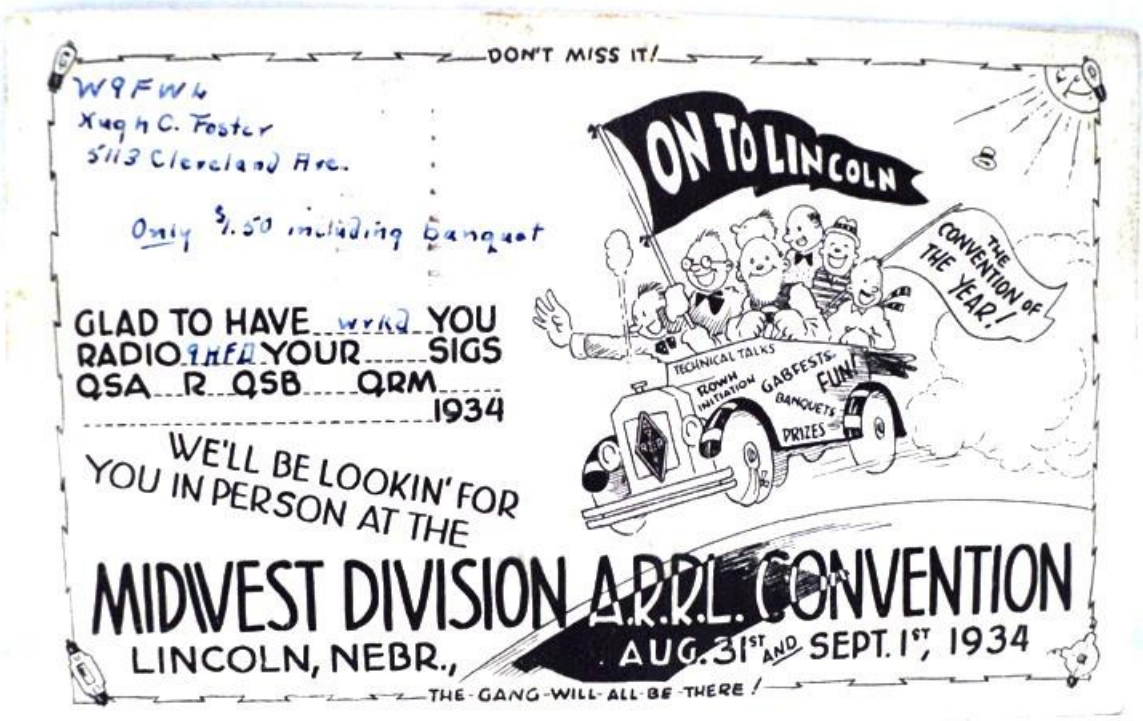


Two more examples from 1934 follow, the first, from W7CMO, a design used many times, and later "stolen" by other QSL printers:



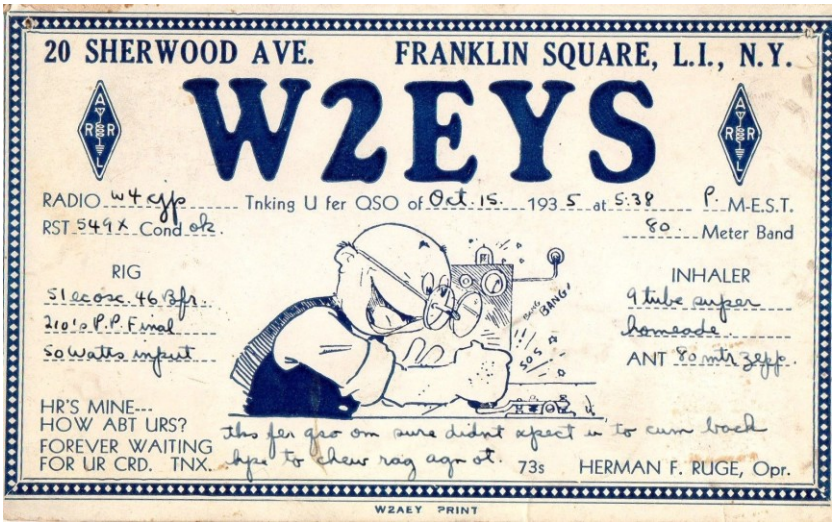
The Way We Were (5)

The second example is from W9FWL, and is a special card design announcing the Midwest ARRL Convention held in Lincoln, Nebraska:

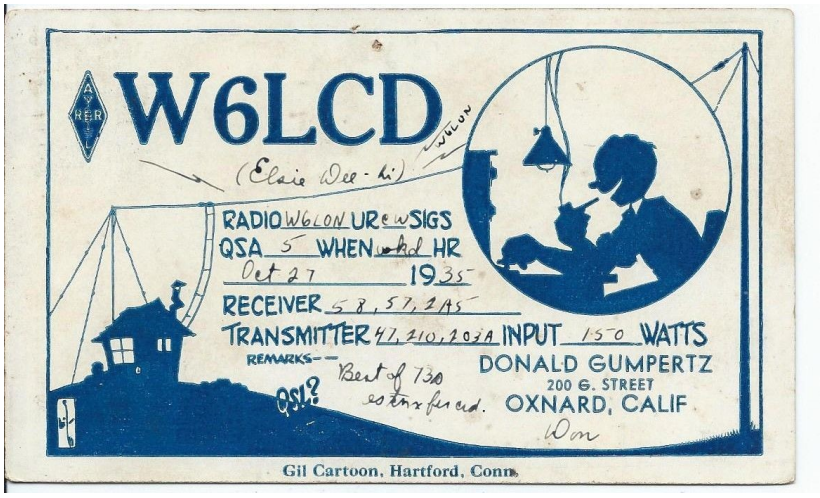


Moving on to 1935, here are two examples of cards using Gil's artwork and frequently copied by other printers. The first card is from W2EYS of Franklin Square, Long Island and the second is from W6LCD of Oxnard, California. The card from W6LCD is printed by "Gil Cartoon, Hartford, Connecticut."

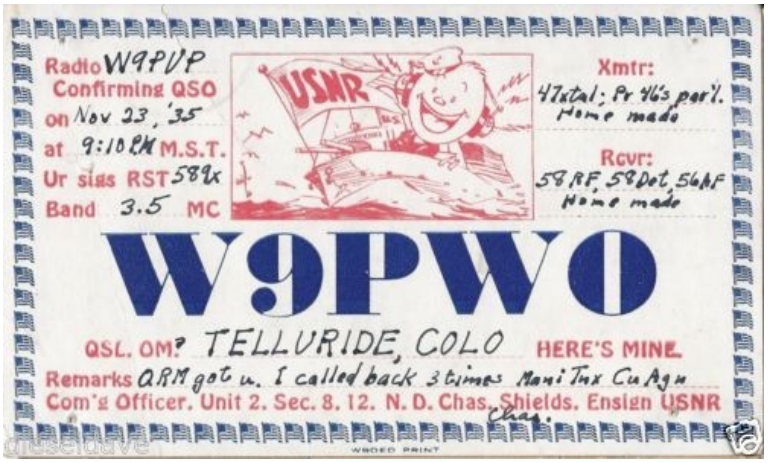
I have seen many "copycat" designs of these, dating from the 1950s and 1960s, but they are certainly not a product of Gildersleeve.



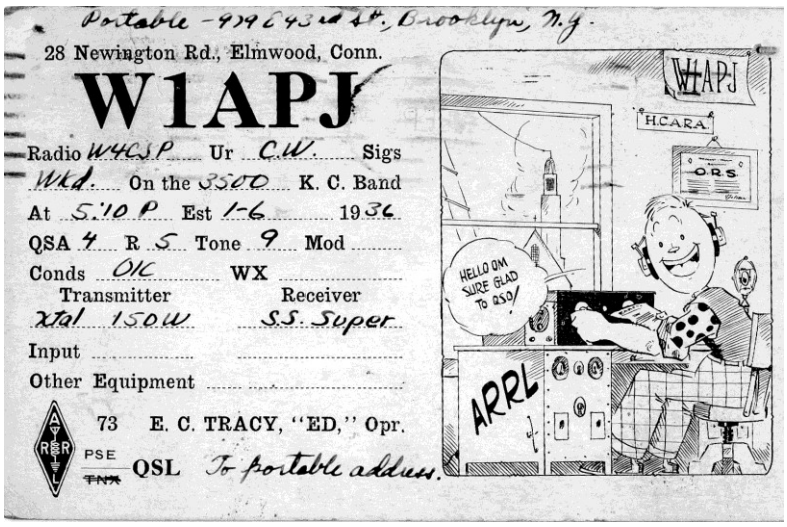
The Way We Were (6)



The next card, our last 1935 example, was apparently also intended as a "standard cut," but it is the only example I have been able to find. It is from W9PWO of Telluride, Colorado and focuses on the operator's membership in the United States Naval Reserve:

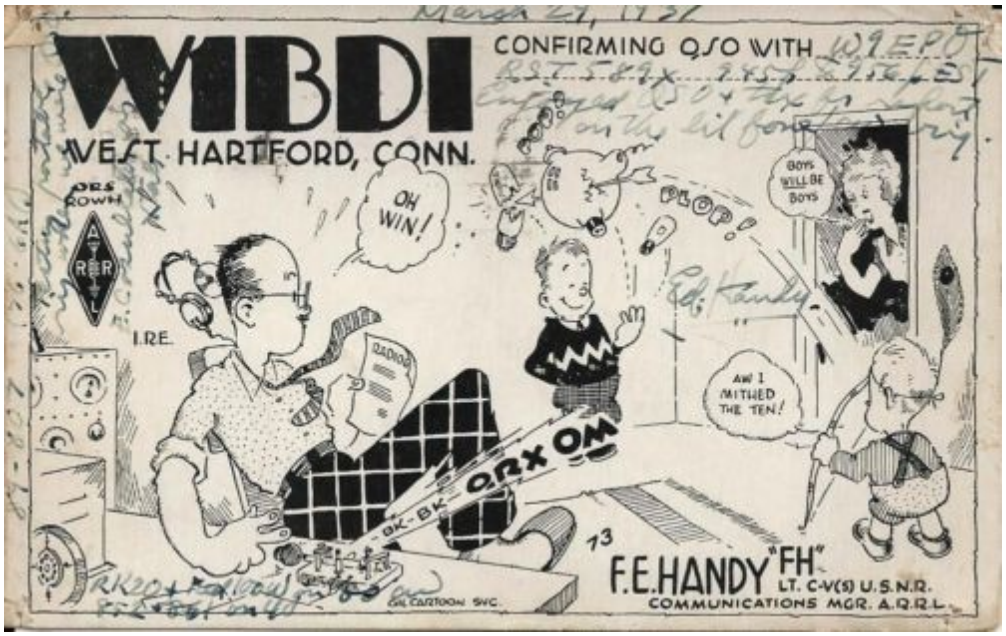


From 1936, Gil again applies his most common features to this card from W1APJ:

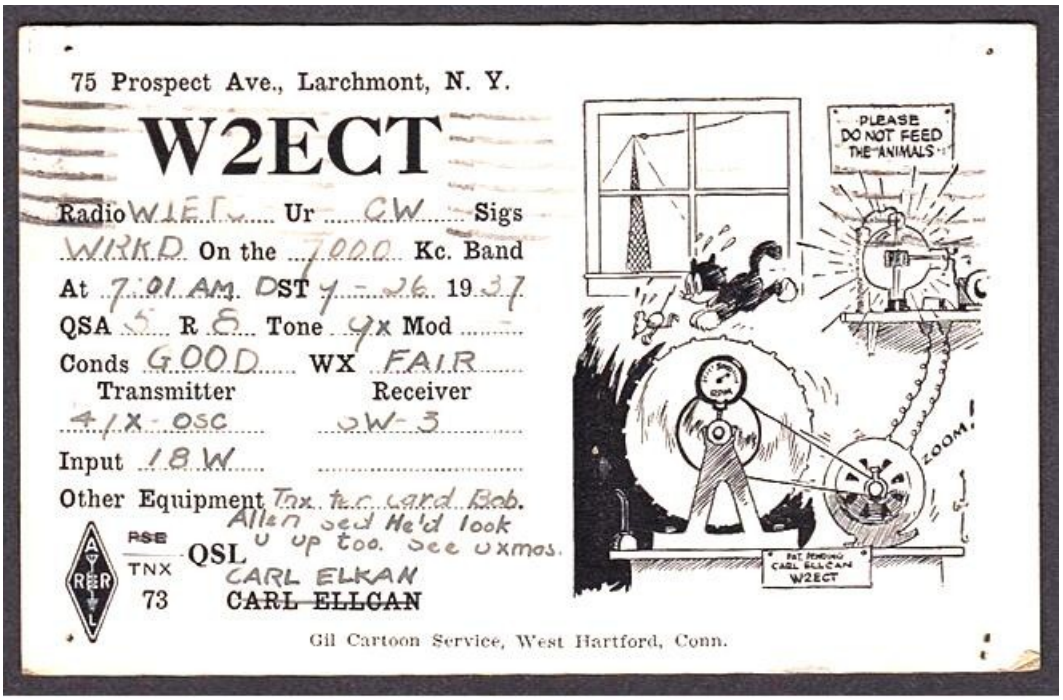


The Way We Were (7)

This card, dated 1937, is from W1BDI, F.E. Handy, for many years the Communications Manager of the ARRL:



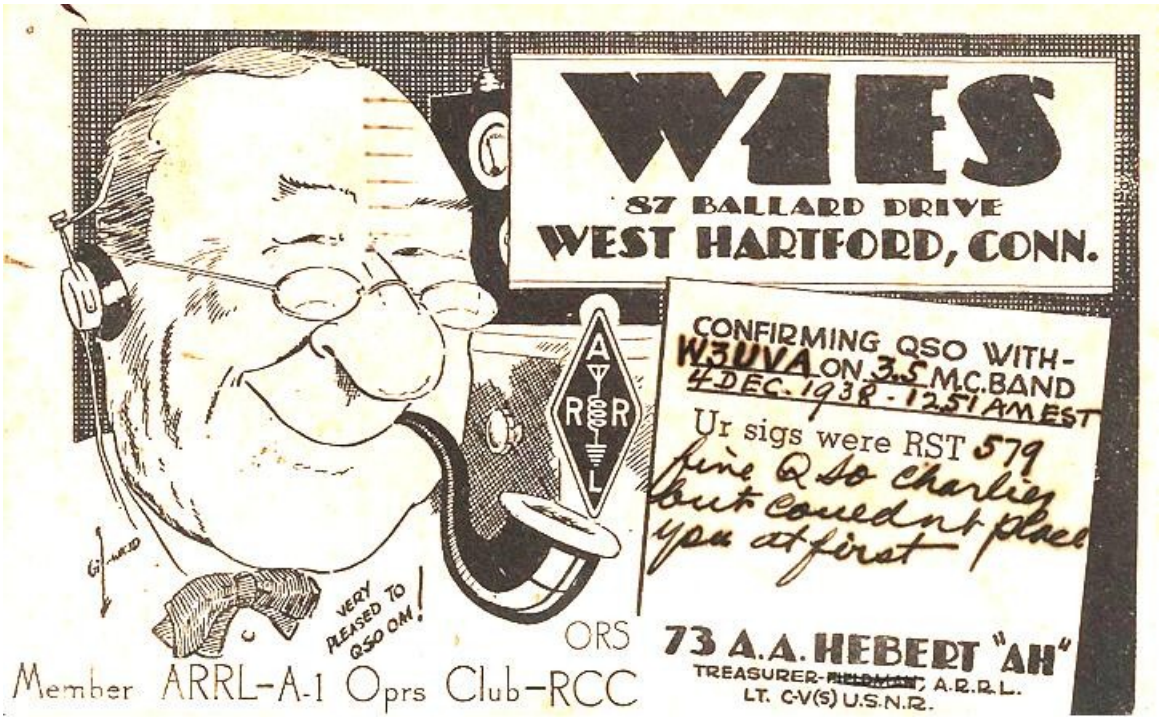
This card from W2ECT, however, is another departure from Gil's usual design:



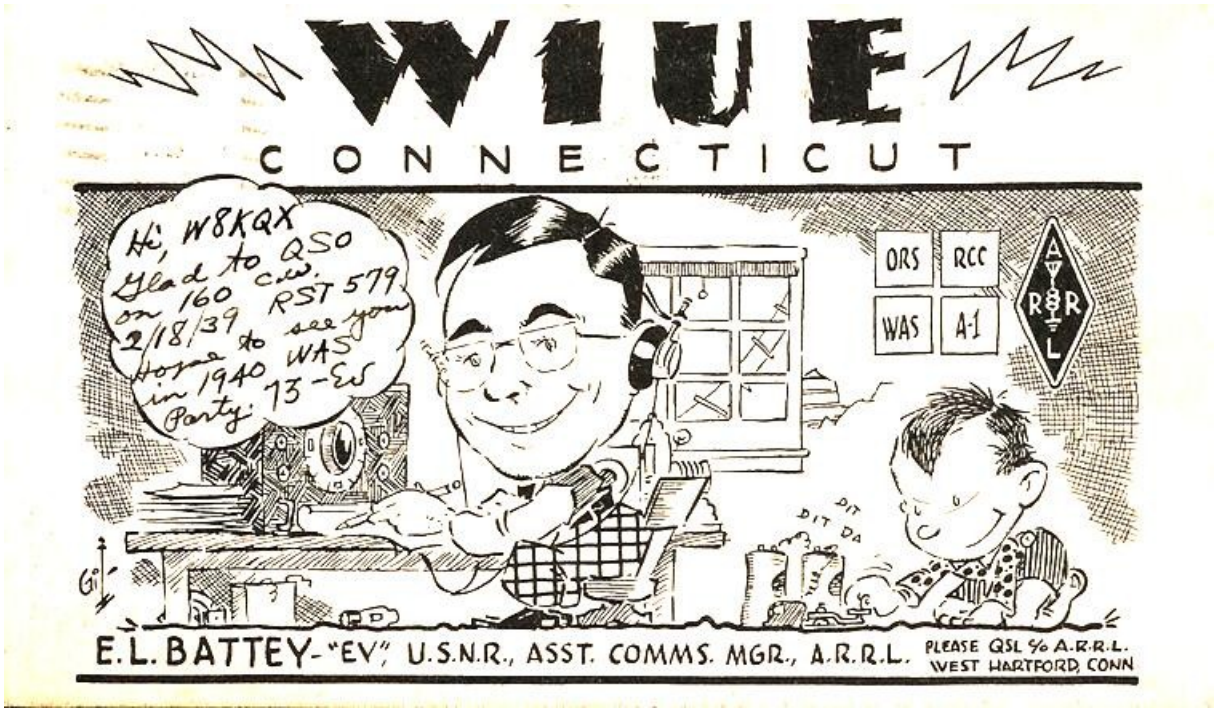
A high power transmitting tube is being powered by a cat-driven generator.
Above the final stage is a sign reading, "Please do not feed the animals."

The Way We Were (8)

From 1938, here's a card from A.A. Hebert, W1ES, another former ARRL staffer:

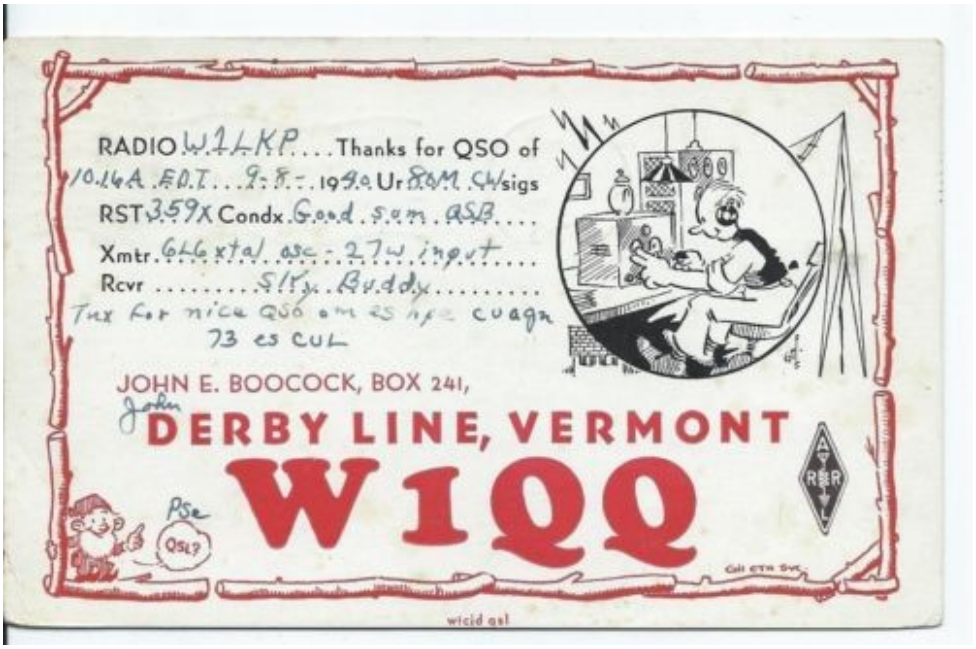


Here are several examples from 1940. The first, from W1UE, "Ev" Battey, former Assistant Communications Manager for the ARRL:



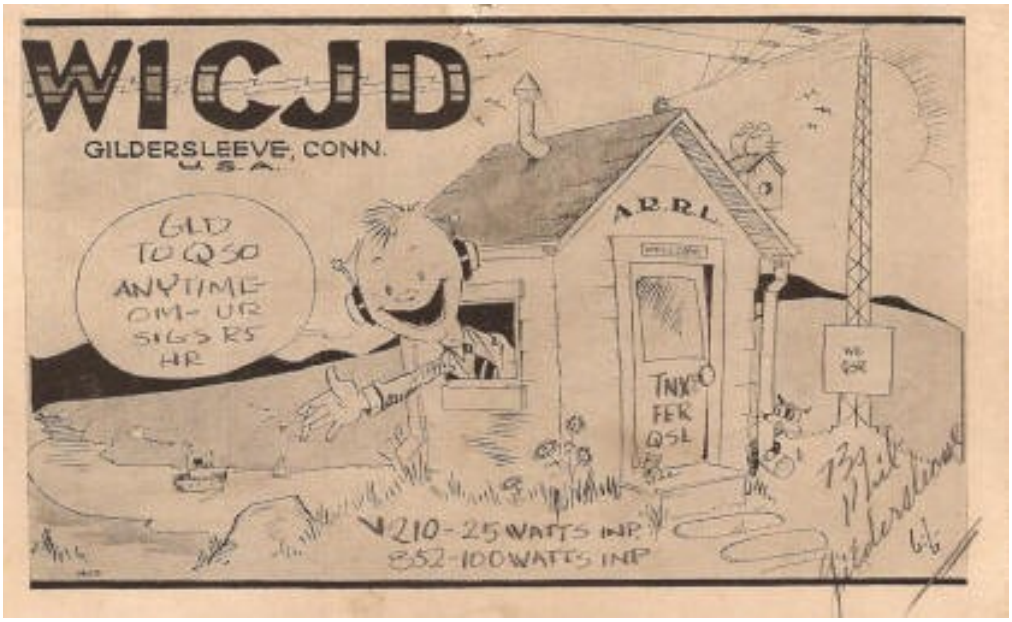
The Way We Were (9)

The second example is from W1QQ, showing yet another “standard cut” design:



Before we move on to the next decade, this study would be incomplete without two examples of Gil’s designs for his own QSL card.

Both cards are undated, but the first, listing a transmitter using a 210 final, probably dates from the early 1930s. Note that the QTH is given as Gildersleeve, Connecticut. Gildersleeve was a village within the town of Portland, Connecticut. The name derived from Gil’s own family, historically a once prominent family of shipbuilders in the 1800s. (7) For more information on the Gildersleeve shipbuilding legacy, see note (8) below.



The Way We Were (10)

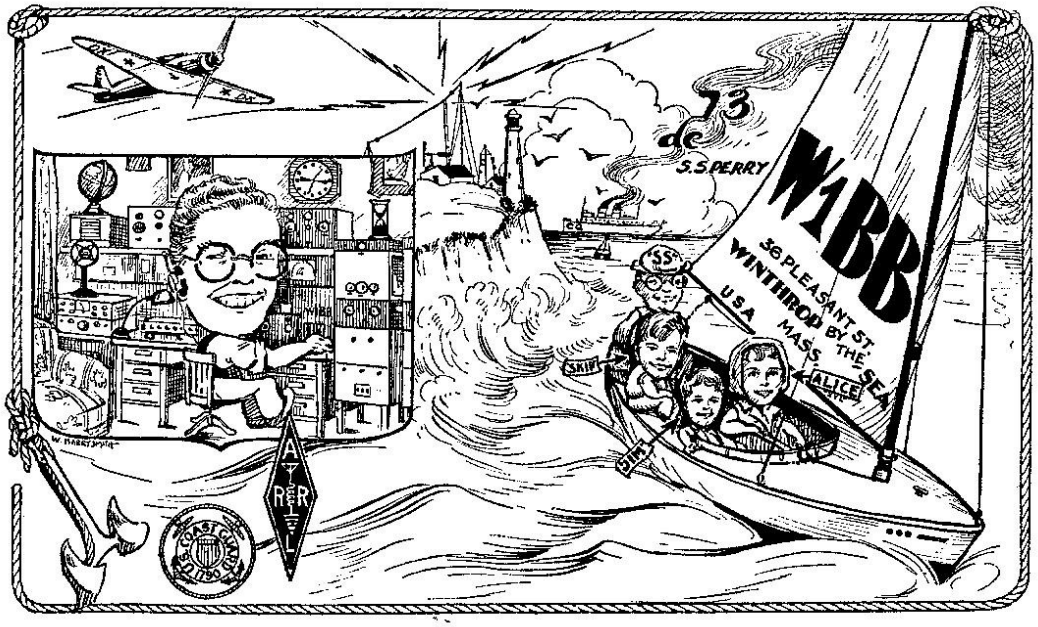
The second card, displaying a more refined technique, is most likely from the late 1930s or early 1940s:

The use of color on the second example also suggests a later printing date.

An extensive search has failed to turn up any examples of cards designed by Gil used by foreign stations during the 1930s or later.

Our first example from the 1940s comes from W1BB, and is dated 1948. Operator Stew Perry has become world famous as "Mister 160," for his many years of operating on and promoting operation on "Topband." Although 160 meters was traditionally thought of as a "local" band only, mainly for ragchewing, Stew made serious efforts to disprove that.

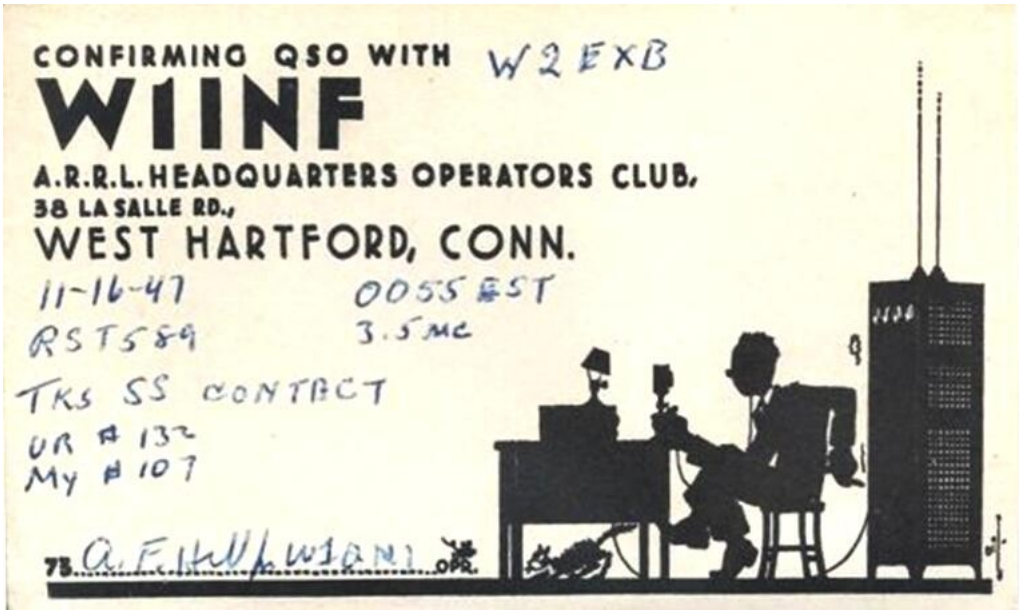
After many years of tests with foreign amateurs, Stew became the first to make DXCC on 160 meters, considered an amazing feat back in 1976. (4) His efforts provided the encouragement for many other operators to follow suit, and today "Topband" has proven itself to be an excellent DX band, especially since vast improvements in receiver and antenna technology have made DX working much easier. Our QSL example, however, confirms a contact on 40 meter CW, during an operating event called, "Lo-Nite."



There are several fine articles covering the life and work of "Mister 160," available online, and I recommend them to those interested in discovering more about one of amateur radio's truly "great men." (5) (6)

The Way We Were (11)

Everybody knows that W1AW, the Maxim Memorial Station, is the call of ARRL Headquarters. But did you know that there is more than one station at ARRL Headquarters? One of them is W1HQ, the Laird Campbell Memorial station. Laird Campbell was best known as W1CUT, former Technical Editor of QST. The other station is W1INF, the ARRL Laboratory station. W1INF was originally licensed as the ARRL Headquarters Operator's Club. Here's their Gil-designed card from 1947:



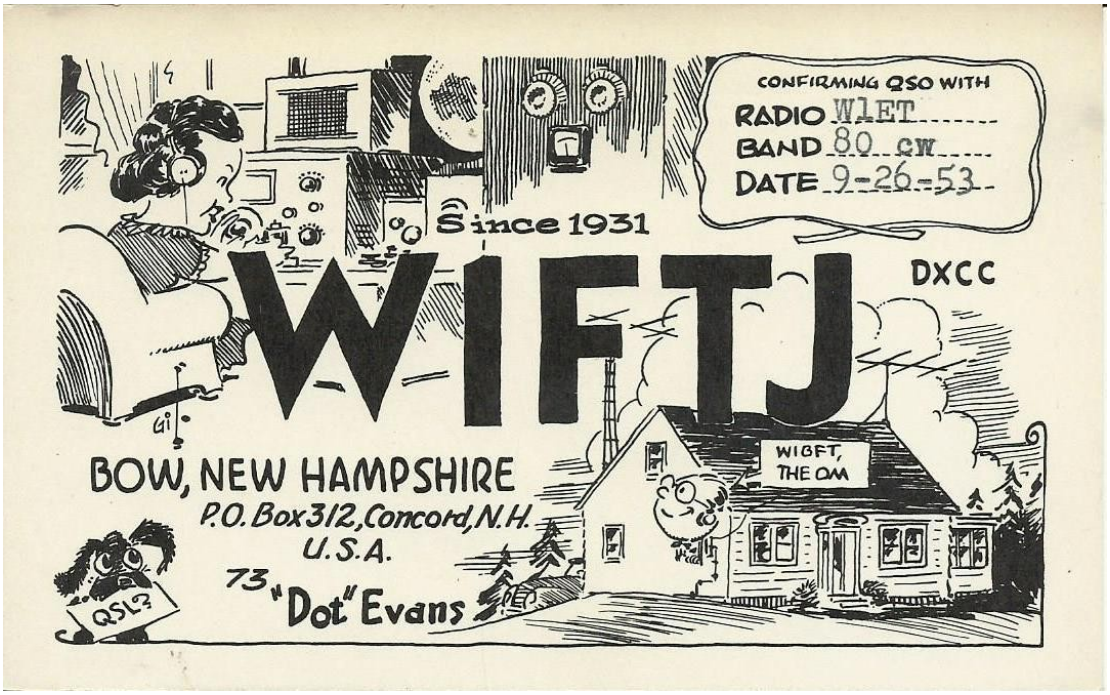
Gil's signature can be seen at lower right. Note that the address is that of the previous Headquarters address in West Hartford, before the League moved to its present location in Newington in 1964.

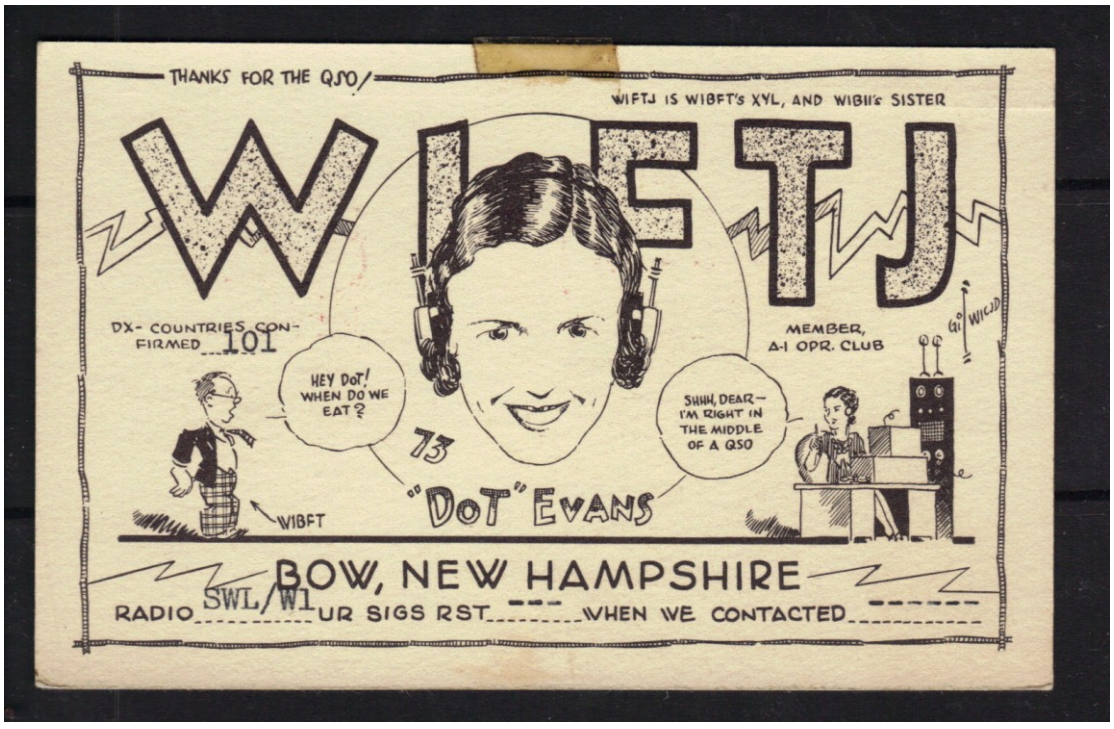
Gil's artistry can also be seen in three other examples associated with the ARRL. The first is the standard "QST" logo appearing for many years, with lightning bolt shooting out from the "T."

The second was the QSL design for the W1AW QSL that was used for many years, as well.

The Way We Were (12)

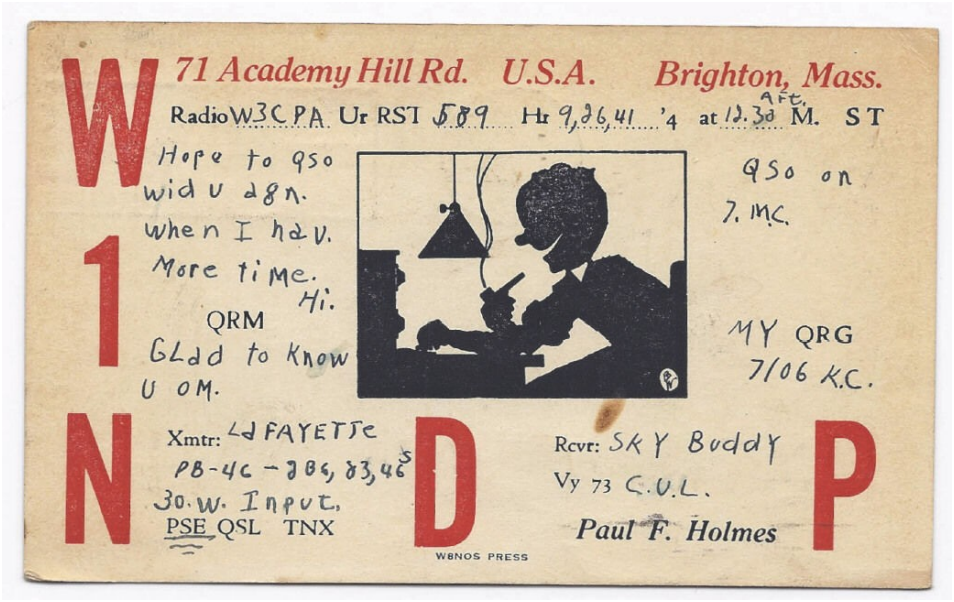
Here are two examples of personalized cards for “Dot” Evans, W1FTJ, from 1950 and 1953:



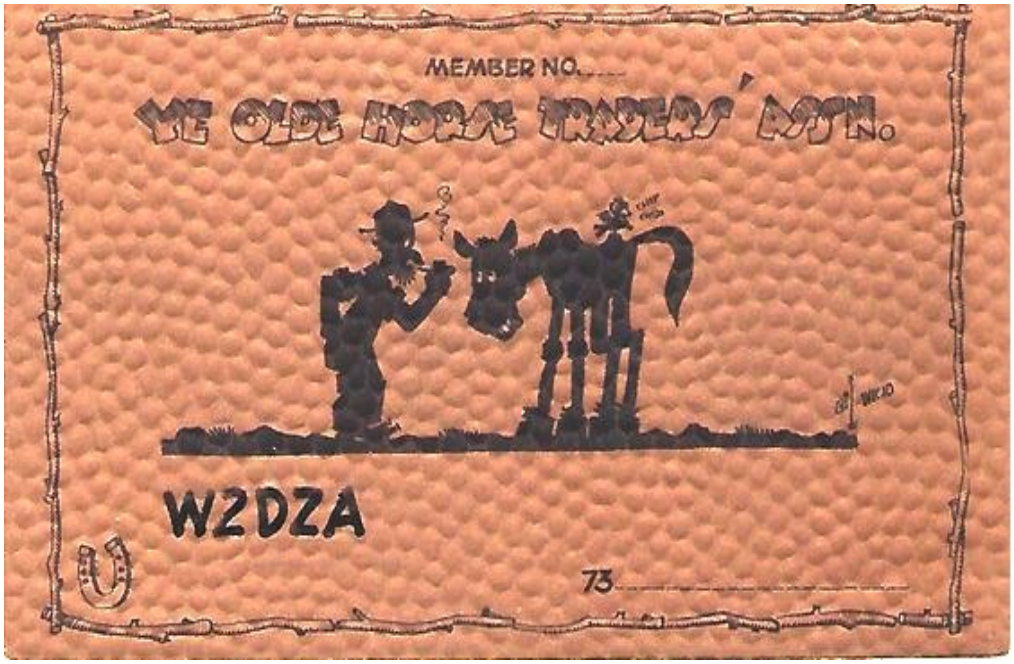


The Way We Were (13)

This is an abbreviated form of Gil's work as seen on W6LCD, above on page 27, on the QSL of W1NDP from 1941, also the model for many imitations:



One of the great amateur radio operators I've known was the late Alex Knights, W2DZA, formerly of Teaneck. I knew Alex in the 1960s, as a member of Air Force MARS. Alex was a true "old timer," having first been licensed back in 1914 with the call 2TW, and later 2UY, finally receiving his W2DZA call in the early 1930s. He was an avid VHF-UHF operator, and inveterate homebrewer. I was honored to receive Alex's vast QSL collection.

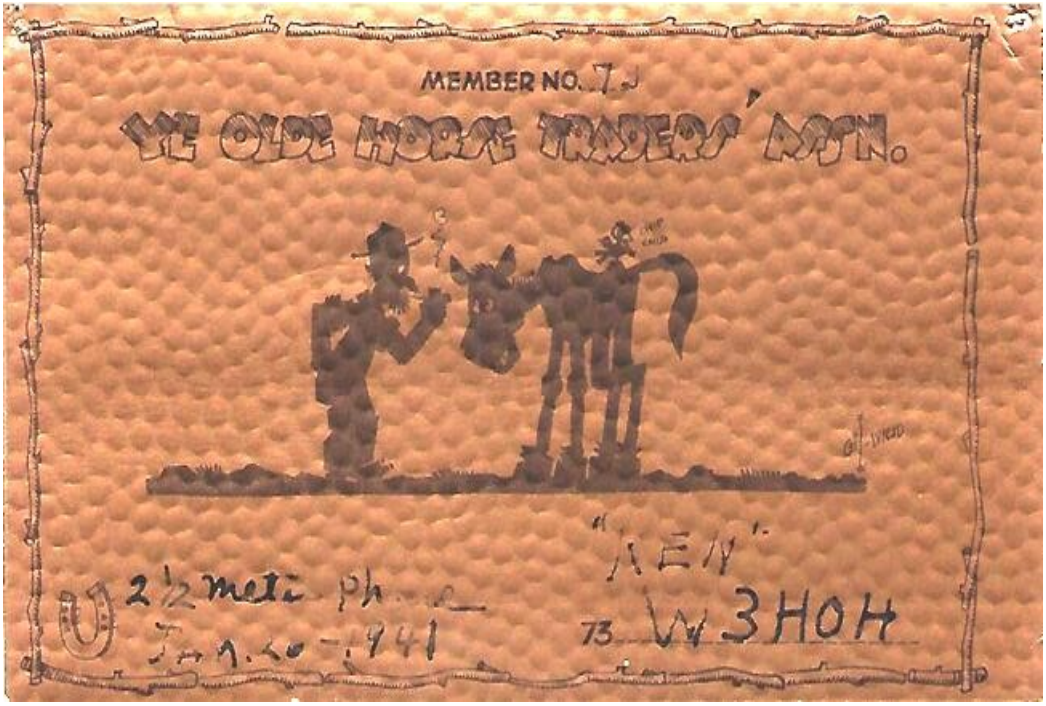


The Way We Were (14)

Alex operated all VHF-UHF bands from 6 meters to 23 cm, with all home built equipment, with one exception. His 1296Mc. station consisted of a converted World War II surplus AN/APX-6 Transponder, a device used in aircraft to provide "IFF" (Identification Friend or Foe) signals from nearby aircraft. It sent out a signal and listened for an expected response of the proper type to insure the aircraft was "one of ours," and not the enemy's.

Alex completely rebuilt one of these to provide a CW and AM modulated signal with crystal control on the 23 cm band. The antenna was made from 450 ohm open wire line, bent into the proper shape to form a 32 element collinear array in the attic and rotated by hand. I always marveled at Alex's work, and he was a great inspiration to me and others.

Alex was a member of a VHF net in the 1940s called the "Horse Traders." The net had special QSL cards printed for its members, designed by Gil, W1CJD. Above is Alex's card from the 1940s and another, below, from W3HOH in Bernardsville, when Somerset County was still in W3-land:



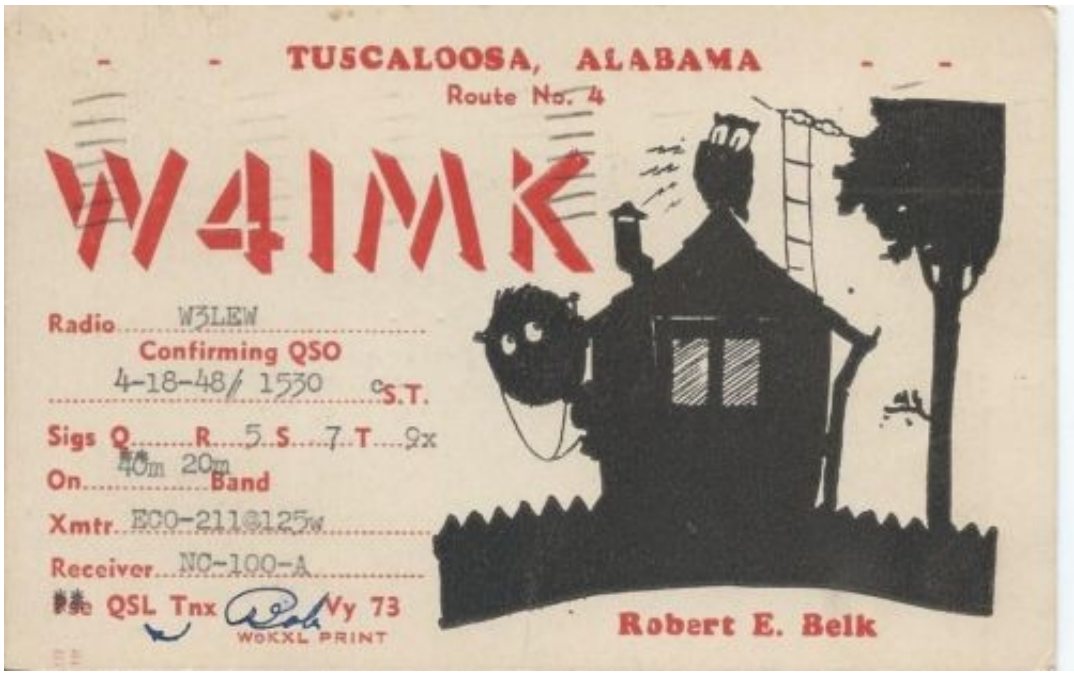
At the end of World War II, the territory included in most call areas were changed, and all of New Jersey became W2-land. When that occurred, Ken, W3HOH's call was changed to W2QVH.

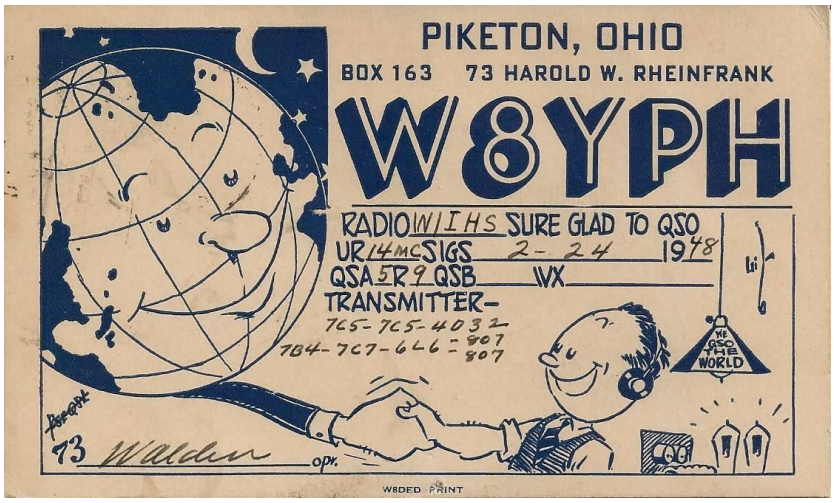
He remained an active VHFer for many years.

The Way We Were (15)

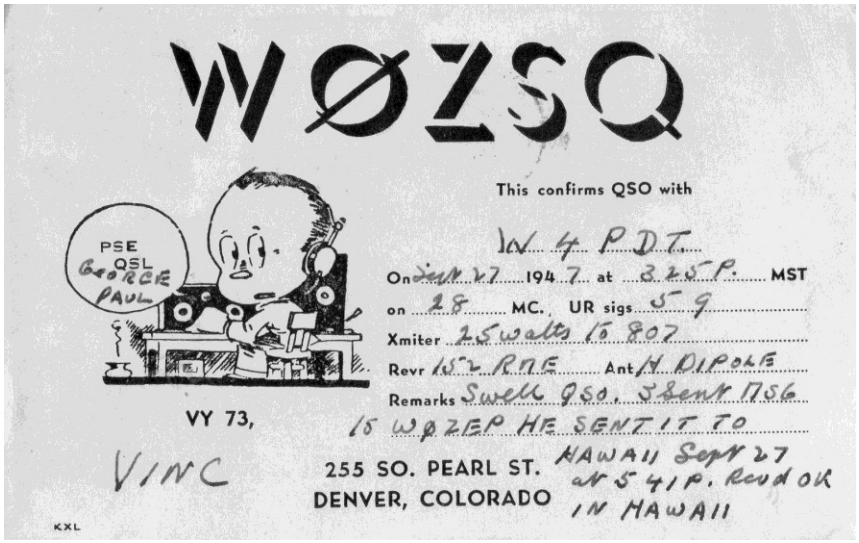
Here are some more cards designed by Gil from the 1940s. The first is from W2GFW in 1950:

Next is W4IMK from 1948, one of several other "standard cut designs," that follow:



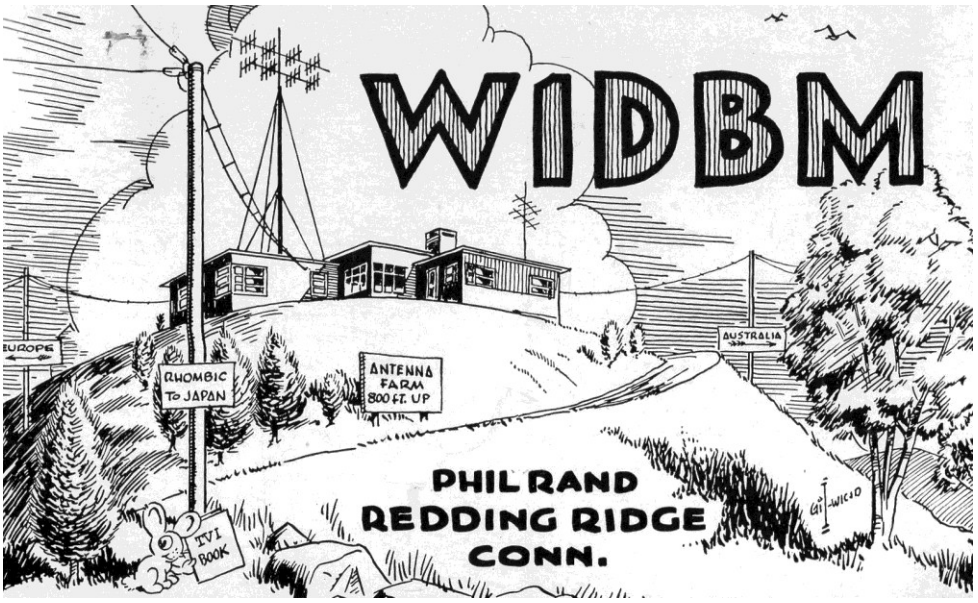


Finally, this card from WØZSQ dated 1947 appears to be a Gil cartoon design.
It is unsigned, but its characteristic “melon head” styling typifies Gil’s renderings:



The Way We Were (17)

Moving on to the 1950s, here's Gil's design for W1DBM dated 1956:

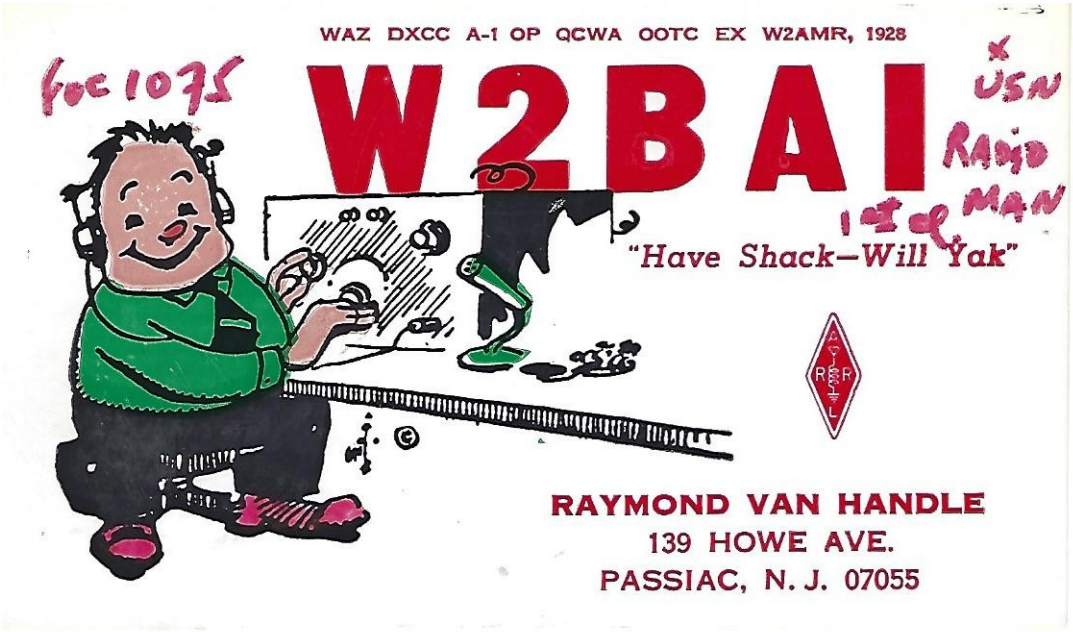


Phil Rand was a once very prominent member of the ham community. His full name was Philip S. Rand. He was the son of one of the founders of the Remington-Rand Corporation, and served as an electronic engineer there in the 1940s. He became famous for his many articles and a book on the subject of television interference (TVI), once the plague of amateur operators, especially on the VHF bands. In the 1950s, he worked closely with Lew McCoy, W1ICP, at ARRL Headquarters on TVI problems experienced by amateurs. (9)

Three final examples complete our study of Gil's QSL artwork. The first is W3AIZ, dating from 1969, the other two, from the 1970s:

The card from W1DBS is from a QSO I had in 1971, but the card is much older, probably from the 1940s.

Our final example is from another QSO from 1973 with Ray, W2BAI, actually a colorized version of a card from the 1960s:



The Way We Were (19)

And so, we come to the end of this installment of our series on QSL artwork. "Gil" was a great asset to our hobby, combining skill and humor and making our ham radio lives a little richer for his efforts. When he became a Silent Key in 1966, a lot more died with him. He will never be replaced. Next month, we will look at the work of another famous ham radio cartoonist, Otto Eppers, W8EA/W2EA.

73,

Fred W2AAB

NOTES:

(1) Massara, Jim (N2EST), "Legendary Ham Cartoonist Gil – 'Cartooning and Tuning Radios – The Little-Known Career of Cartoonist Phil Gildersleeve,'" Avail. at: hamtoons.net/legendary-ham-cartoonist-gil/
(2) "Phil Gildersleeve W1CJD *1908-1966*" (By W8SU), Avail. at: www.oldqslcards.com/W1CJD.pdf
(3) "The Artwork of Phil Gildersleeve," by Mike, AB3AP, Avail. at: udel.edu/-mm/ham/gil
(4) Briggs, Jeffrey, K1ZM, "W1BB -1990" (Obituary), Avail. at: www.qcwa.org/w1bb-00191-sk.htm
(5) Rauch, Tom, W8JI, "160 Meter History," Avail. at: https://www.w8ji.com/160_history.htm
(6) "W1BB" (Northern Heights ARS Archive), Avail. at: https://www.nhars.org/?page_id=1357
(7) "Portland, Connecticut," (Wikipedia), Avail. at: https://en.wikipedia.org/wiki/Portland_Connecticut
(8) "The Gildersleeve Shipbuilding Legacy in Portland," Avail. at: https://connecticuthistory.org/the-gildersleeve-shipbuilding-in-portland/
(9) "Philip S. Rand – W1DBM - *1906-1995*" (By W8SU), Avail. at: hamgallery.com/Tribute/W1DBM/w1dbm.pdf

Steve WI2W and Zack KC2RSS

Great work by the climbing crew!

Oct 21 River Road Street Fair

Cold and windy weather was the order of the day for FLARC's semi-annual street fair appearance. Although we conceded early to the poor conditions and low turnout, the club made some friends and hopefully some new members. A thanks to all our volunteers!!

A TNX to KC2LTM, W2ABE, W2NZ, W2JC, KD2BRV, W2KBF, WA2ALY and WX2R for making it happen.

Judith KC2LTM and Larry WA2ALY greeted visitors

Our stalwart group of volunteers

Pete W2HP stopped by to visit. Larry WA2ALY taught him code (!)

FLARC Visits Edison State Park

Despite the surprise Nor'easter, 20 FLARC members and guests visited Edison State Park in Menlo Park to complete our Thomas Edison study group following our trip to West Orange in August. A big thanks to Chuck Perillo K2RRV for being an outstanding tour guide in a nearly two hour presentation. Thanks to everyone for coming!!

The Edison tour group

Chuck K2RRV leads the tour through Edison's life

The perpetual light which has burned continuously since 1929.

FLARC GOES TO RSGB

Whilst on holiday in Europe, Ed WX2R took a side-trip to Milton Keynes (north of London) for the Radio Society of Great Britain annual conference. With more than 600 hams in attendance over the three days, the program featured a wide array of topics from "Beyond 150 Countries On 144MHz" to "Using Drones To Measure Antenna Radiation Patterns" to "The Struggle To Defend HF Against The Rising Digital Tide." Ed got a chance to meet with a number of hams and take in the atmosphere which, while similar to events here, has a slightly different feel. He also participated as a audience member for the *ICQ Podcast*, the largest amateur radio podcast in the UK. It can be heard here at -- Episode 280 when released in early November. https://www.icqpodcast.com/ He's the guy with the American accent.

The FT8 panel drew well over 100 attendees

Tea time brought attendees together with clubs and interest groups-- no vendors allowed.

GB3HQ was the mobile special event station... Ed got a chance to operate

A panel on 2m DX ... a high interest item to UK hams

Setting up for the live *ICQ podcast*

WX2R went all the way to the RSGB and only got a badge, a book and a t-shirt.

2 November 2018 Business Meeting

President Brad KM2C called the meeting to order at 7:10 p.m. The members rose and recited the Pledge of Allegiance.

President Brad KM2C announced that we will probably hold our future monthly business meetings in the Community Center's Teen Lounge rather than the Card Room. The Lounge has more capacity for our growing membership. Jim W2JC noted that the Lounge acoustics are terrible and that we will need to find a solution.

President Brad KM2C showed a short video covering highlights of our recent antenna and tower upgrade project.

President Brad KM2C asked if there were any visitors or new members present. There were none.

President Brad KM2C called the roll of officers and trustees and all except Secretary Randy WU2S were present. The meeting had a quorum to conduct club business.

President Brad KM2C announced that Secretary Randy WU2S is helping his wife return home from the hospital. President Brad KM2C asked the members present if there were any corrections or amendments needed. There were none and a motion was made by John W2JLH and seconded by Gene WO2W to accept the minutes as published. The motion passed by acclamation.

Treasurer Al WA2OWL presented this month's Treasurer's Report. He reminded members that he is now accepting payments for the 2019 membership dues. He noted that the antenna project came in about $500 under budget. President Brad KM2C said that the 48 hours of labor contributed by FLARC members to the project represents a 4 to 6 thousand dollar saving. This effort also gave us a larger group of trained people who know how the antennas are arranged. President Brad KM2C said we may use the remaining funds in the antenna project budget for more climbing gear. Zack KC2RSS suggested purchasing more safety helmets. Skip KD2BRV moved to accept the report as read and Don N2PRT seconded the motion. The motion passed by acclamation.

November 2018 Business Meeting (2)

President Brad KM2C asked if there was any other old business. There was a short discussion about increasing the club's insurance coverage.

President Brad KM2C asked Ed WX2R for a Publicity Committee report. Ed reported the following:

The Fair Lawn Street Fair was cold and windy, and Ed thanked all who came out to represent FLARC. The current Speakers Schedule is:

• November 16: Andrea Slack K2EZ
"The Art and Science of VHF Rovers" .

• December 14: ARRL Speaker TBD.
Note that this date is moved forward one week earlier than usual due to the proximity of Christmas to our regular speaker's date.

• January 18, 2019: Stanley Eikert K3KKH
"A Wireless Three-way Antenna Switch and Display"

• February 2019 FLARC Membership Survey report by Ed WX2R. If you have any topics you want added to the annual survey, contact Ed immediately. This is our last call for survey updates.

• We plan to do an Earth Day event at Great Falls in April in cooperation with the Paterson schools. Ed will inform us when the date is finalized.

• We are considering special events in 2019 at the Garretson Farm and Forge and at the West Orange Edison Labs.

• Ed WX2R reported that he attended the RSGB conference during his recent trip to Europe. He said that there is some interest in establishing a "sister club" relationship between a U.K. club and FLARC.

• January 26-27, 2019: Winter Field Day.
We should start planning.

Thom W2NZ reported on the FLARC YouTube channel (**YouTube.FairLawnARC.org**). Thom noted that our channel total watch time has increased 12 % in the last month to 2500 minutes. Our views have gone up 26 % and we gained 3 subscribers.

Continued on next page.

November 2018 Business Meeting (3)

Jim W2JC reported that the FLARC Twitter feed and web site continue to be very active. The club calendar (**Calendar.FairLawnARC.org**) is always current with our planned events.

President Brad KM2C reported additional details about the month-long antenna upgrade project. We are considering setting up a second repeater for DMR using our new dual-band antenna. Don N2PRT will label the antenna rotators at operating positions #2 and #4 to indicate which beam antennas they turn. President Brad KM2C and Fred W2AAB addressed questions about the CW classes. We are considering running the classes on Saturday or Sunday.

Vice President Van W2DLT reported on upcoming contests and events.

- November 2: ARRL Sweepstakes CW contest
- November 16: ARRL Sweepstakes SSB contest
- November 24-26: CQ Worldwide CW contest

President Brad KM2C asked for any new business.

Vice President Van W2DLT reported that the FLARC Council has decided to establish an annual W2NPT Memorial Award in honor of Frank Leonard, to recognize the long-term contributions of a FLARC member each year.

Gene WO2W announced that we are in good shape regarding preparations for our annual FLARC Auction which will be held on Friday, November 23rd, the day after Thanksgiving. The location is the Fair Lawn Senior Center. Gene reminded the members that this event is FLARC's only fundraiser, so it is important that we have enough people on hand to do the necessary work. He produced a sign-up sheet for the various tasks and asked the members present to volunteer after the business meeting. If you will help the club at this event, please contact Gene directly.

Gene WO2W also reported that our annual FLARC Holiday Dinner will be on December 7 at the Senior Center. He noted that we need a volunteer event chair person to organize the food preparation and event setup. Gene produced a sign-up sheet for members to indicate which foods they would prepare and bring to the dinner. He noted that this event is also our December business meeting at which we conduct the election of officers and trustees.

November 2018 Business Meeting (4)

President Brad KM2C announced that the annual Nominating Committee made up of two trustees has completed their work. Jim W2JC reported for the committee. The recommended slate is:

• President:	Brad	KM2C
• Vice-President:	Van	W2DLT
• Treasurer:	Al	WA2OWL
• Secretary:	Randy	WU2S
• Trustee:	Don	N2PRT

The members present applauded the Nominating Committee's choices. President Brad KM2C opened nominations from the floor. There were no nominations from the members present. Ed WX2R moved that the nominations be closed and Zach KC2RSS seconded the motion. The motion passed by unanimous acclamation.

President Brad KM2C announced that the FLARC Council has discussed an additional role for FLARC Trustees. He said that we are asking Trustees to be responsible for operating positions #1, #2 and #4 as "station masters." The responsibilities include keeping the stations clean and well-maintained. Jim W2JC will be the station master for operating position #2 where we have the computer setup for FT8 and other digital modes.

Glenn KB2MDR donated equipment (Kenwood TS 830-S) to the club in memory of former member Ben Leah KB2EJY (SK) and was applauded by the members present.

The Kenwood TS-830S donated by Glenn KB2MDR

Continued on next page.

November 2018 Business Meeting (5)

President Brad KM2C said we plan to have training sessions on using the Ameritron 600-watt amplifier now that our antennas are in such good condition. Brad may bring in another amplifier to use to get members familiar with high-power operation. The officers and members discussed concerns about RF interference with the Community Center's audio equipment and ways to mitigate it. President Brad KM2C said we will make arrangements to test our radios while a full rehearsal is underway.

Ed WX2R asked the FLARC Council to consider the requirements of the Open Public Records Act (OPRA), since the club is a town-sponsored activity.

President Brad KM2C replied that he has set up a Google repository for club minutes, committee reports, emails and other records. Ed said our goal should be to continue our good relationship with the town by maintaining good records and reduce any potential liability under OPRA.

Having no further business, President Brad KM2C asked for a motion to adjourn. Gene WO2W so moved and John W2JLH seconded the motion. The members present voted in favor and the meeting was adjourned at 8:18 p.m.

[Minutes were transcribed from an audio recording provided by Jim W2JC]

Respectfully submitted,

Randy WU2S, Secretary

FLARC and BARA members congratulate W2TTT at the ARRL Awards Dinner. Gordon received the Technical Achievement Award for 2018.

Rob Roschewsk KA2PBT Highlights FLARC December 14th Speaker Program

ARRL NNJ Section Manager Rob Roschewsk KA2PBT will be our featured speaker to close the third consecutive year of monthly FLARC programs on December 14th.

Rob will discuss the NNJ Field Organization and what it means to ARRL members. Rob has aggressively sought to fill every position on the section roster -- a major achievement. Rob looks to have many of his appointees in attendance as well to highlight their duties and answer questions.

The program will be held on Friday, December 14th beginning at 7PM at the Fair Lawn Senior Center, 11-05 Gardiner Road in Fair Lawn.

Please note that this is the second Friday in December -- not the third -- a change because of the holiday season.

Rob has been an ham since 1982 and an active member of The 721st Mechanized Contest Battalion operating under the call WC2FD.

Based in the farmlands of Warren County, New Jersey ***the 721st*** is a bunch of young adults (and a few old ones) that set up in public places during contests.

So see you on December 14th to close out another year of the FLARC monthly speaker series!

Rob KA2PBT

More Check-Ins For The Near and Far Net

Our list gets longer so we need another page -- here are more (at least once) check-ins to the Monday *Near and Far* net.

Name	Call
Aly	AL0Y
Bob	N2HIP
Judith	KC2LTM
Fred	W2ABE
Paul	W2IP
Chris	W2TU
Stan	KC2K
John	K2BIX
Harry	KB3PQP
Paul	K2PJC
Noel	N2OEL
Tony	KA2TAM
Tommy	KD2OBY
Tom	N2AXX
Benjamin	KD2QHI
Marco	KC2ZMA
Nomar	NP4H
Bruce	NJ2BK
Ros	KD2GKA
Tony	N2SIQ
Larry	KD2QFI
Bob	W2REC
Bob	KD2OPT
Bill	KW2H
Dennis	K2DJS
Bill	K2WH
Glenn	KB2MDR

In a Nutshell

Have a Happy Thanksgiving AND do not forget the Fair Lawn Auction, held at the Senior Center on 11th Avenue, one block north of Fair Lawn Avenue! It is a great event and fun is had by all!

So see you there.

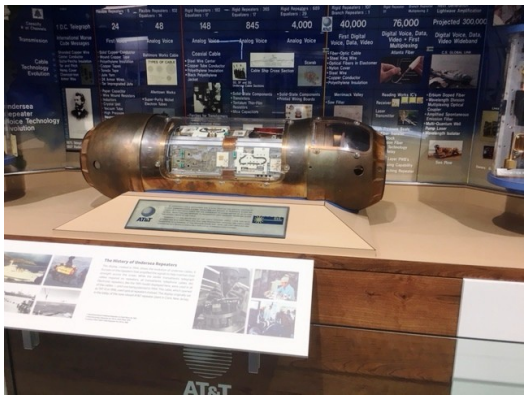
73, Fred W2ABE.

Get On The Air!

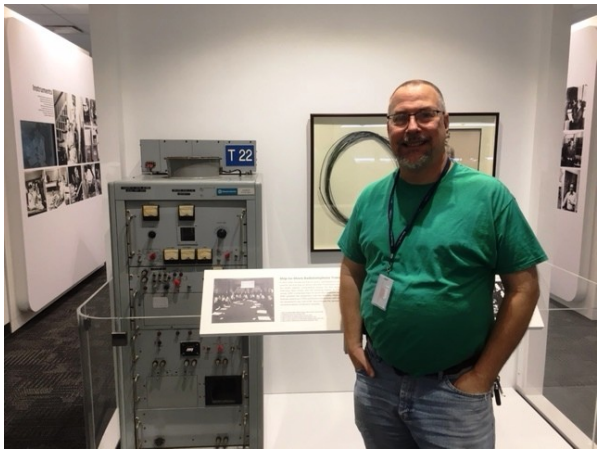
You Worked Hard For It...
Use Your License!!

WX2R Visits the AT+T Communications Museum

After an ARRL meeting, Ed WX2R was invited by NNJ Section Director Rob Roschewsk KA2PBT to visit the recently opened AT+T communications museum in Holmdel. This QTH is also the home office of Gordon W2TTT who was not on location, but sent regards and background on the displays. We'll look to plan a FLARC visit sometime in 2019.



Section of undersea cable telephone repeater



Rob KA2PBT and an original transmitter

Ed WX2R & an original (un-launched) Telstar from circa 1962